IBM Cognos Express Advisor
Version 10.1.0

User Guide

Note
Before using this information and the product it supports, read the information in "Notices" on page 127.

Product Information

This document applies to IBM Cognos Express Version 10.1.0 and may also apply to subsequent releases. To check for newer versions of this document, visit the IBM Cognos Information Centers (http://publib.boulder.ibm.com/infocenter/cogic/v1r0m0/index.jsp).

Contents

Introduction

This user-friendly software provides a powerful tool to access information and analyze data. When IBM® Cognos® Express® Advisor is installed on your computer, you will be able to understand data in new ways. You will view information from different perspectives, as often as you like, with the latest up-to-date figures. You can analyze information in many ways and focus on key result areas of your own choice. With growing familiarity you will be able to customize your own reports or have Express Advisor do dynamic analyses of results important to your decision-making.

Data is made available in views that are organized in a folder structure. Depending on the security set by your system administrator, it is possible to create new folders and views. You can keep folders and views to yourself or make these available to others. It is possible to create exception reports and customize these with colors to focus attention and trigger action. You can quickly generate calculations using timely, up-to-the-minute data, make charts, drill up or down to investigate your financial or operational information or drill through to your relational data. You can then save or discard these as you wish.

Express Advisor client is available as an ActiveX edition and contains the current version of Express Advisor client to display views. A view item is displayed in Express Advisor client showing the data stored in the OLAP database.

This document is intended for use with Express Advisor. Express Advisor provides you with a powerful tool to improve business results. Your systems administrator or supervisor will give you access to one or more sources of your data residing in the database of your organization.

Audience

Express Advisor is meant for users who are familiar with the Microsoft Windows environment, but not interested in programming or working up detailed spreadsheet calculations.

Finding information

To find IBM Cognos product documentation on the web, including all translated documentation, access one of the IBM Cognos Information Centers (http://publib.boulder.ibm.com/infocenter/cogic/v1r0m0/index.jsp). Release Notes are published directly to Information Centers, and include links to the latest technotes and APARs.

You can also read PDF versions of the product release notes and installation guides directly from IBM Cognos product disks.

Accessibility features

Accessibility features help users who have a physical disability, such as restricted mobility or limited vision, to use information technology products. This product has accessibility features. For information on these features, see the accessibility section in this document.

IBM Cognos HTML documentation has accessibility features. PDF documents are supplemental and, as such, include no added accessibility features.

Forward-looking statements

This documentation describes the current functionality of the product. References to items that are not currently available may be included. No implication of any future availability should be inferred. Any such references are not a commitment, promise, or legal obligation to deliver any material, code, or functionality. The development, release, and timing of features or functionality remain at the sole discretion of IBM.

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Chapter 1. System overview

IBM Cognos Express Advisor and the IBM Cognos Express Data Advisor together are intuitive and powerful tools.

Express Data Advisor creates a model definition that is based on your relational tables. With this model definition Express Advisor Server generates an OLAP database and view for analysis of the data.

Express Advisor allows you to understand this data in new ways and from different perspectives. Express Advisor can also receive information in other ways in order to focus on key result areas of your choice. You can customize reports or have Express Advisor do dynamic analyses of results that are important to the decision-making process.

System introduction

IBM Cognos Express Advisor has the following components or items to display information in either graphical or tabular formats:

- Views display the requested data that is stored in the OLAP database.
- Canvases contain panels. The panels contain views that can communicate with each other, enabling you to create dashboard applications.
- Dimensions group related data together in a View.
- Members are single types of data. Members are grouped together in a Dimension.

Canvases

Canvases contain panels. The panels contain views that can communicate with each other, enabling you to create dashboard applications.

Views

The view is the work space that is defined by the user. The view is the primary place that data is made available and resolved into purposeful information. A view is a collection of dimensions. Many related views share common dimensions, for example, time intervals, is the unique dimension that gives purpose to the view.

The OLAP database is represented by a cube. The cube is a subset of the data in the OLAP database.

The view shows the data from the cube that is stored in the OLAP database. A view connects to a database. A database connects to a data source.

Views can be organized in folders and stored in the repository where the data source items and database items are stored, as well as locally on your own system. It is also possible to export views to a workbook in Microsoft Excel spreadsheet software. There are various printing and formatting options for views.

Warnings

A warning is shown in a view when Express Advisor encounters a problem or when important items have changed. For example when the connection to the server is lost or when dimensions have been added to or removed from the database.

Warnings can be saved and displayed later.

Notes

The OLAP administrator can add database notes to the OLAP database. When a view is on-screen, any information that is relevant to the view can be displayed as a note. A note can be used to provide information about the status of the database and the contents.

There are various printing and formatting options for notes.

Dimensions

A dimension contains the related items that describe either the context of a fact or a measure of a fact. Context dimensions can include time, product, person, and location. Measure dimensions can include quantity and value. Dimensions can form a hierarchical structure, for example, the dimension location can include country or region, city, building, and floor.

The maximum number of dimensions is 256. If dimensions contain more than 8.000.000 members, then the maximum number of dimensions is decreased with one for each of these dimensions.

Members

A dimension is subdivided into members. A list of members in the same hierarchy form a dimension. For example, the months January, February, March are members that belong to the member Quarter 1. Quarters 1, 2, 3 and 4 are aggregated into the member year. All are part of the time dimension. Members are divided into inspread members and offspread members.

The maximum number of members is 16.000.000.

Inspread members

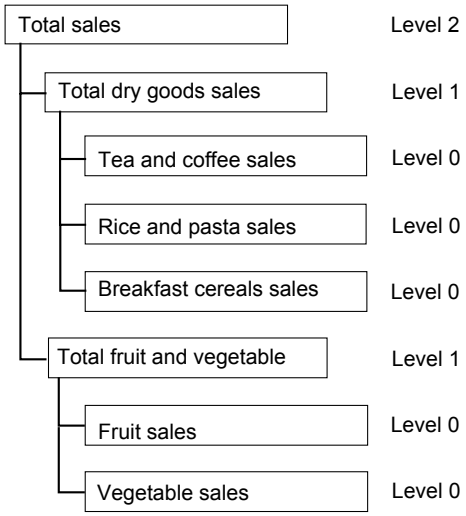
The inspread members are the members that show directly in the visible table. For example, if the members for time and product show, the inspread members can be month plotted against product type.

Offspread members

The offspread members are those members to be evaluated. If month and product type show directly in the table as inspread members, the offspread member can be a location. For example, if Germany is the offspread member, the table will show time against product sales for the member Germany. If the offspread member is changed to Italy, the table shows time against product sales for Italy.

Levels

The members of a dimension are organized according to level. The most discrete member is at level 0. The example illustration shows tea and coffee sales, rice and pasta sales and breakfast cereal sales at level 0. It shows total dry goods sales and total fruit and vegetable sales at level 1 and total sales at level 2.



Alias tables

The Advisor server can use unique member names for the members of an OLAP database. The member names shown in Express Advisor do not have to be the same as these unique member names. An alias table tells the Express Advisor server how to match the member names in the database to the member names shown in Express Advisor.

Folders

Folders are used to organize items in a structure, for example views. Folders can be stored in the repository where the data source items and database items are stored, as well as locally on your own system. A folder can contain child items of all defined item types to organize views and other items in the repository.

System requirements IBM Cognos Express Advisor client

The client system for IBM Cognos Express Advisor should meet the requirements.

Requirement	Specification
Operating System. One from the list is required. All operating systems should have installed the latest service pack and all current updates.	Microsoft Windows XP Professional Microsoft Windows Server 2003 Standard Edition Microsoft Windows Server 2003 Standard x64 Edition Microsoft Windows Server 2003 Enterprise Edition Microsoft Windows Server 2003 Enterprise x64 Edition Microsoft Windows Server 2008 Microsoft Windows Server 2008 x64 Edition Microsoft Windows Vista Business or higher Microsoft Windows Vista x64 Edition Business or higher
Required software	Microsoft Internet Explorer 6.0, service pack 2. ActiveX enabled
Disk space	10MB
Memory	512MB
Processor	Pentium 4 or higher
Color depth	16 bit color or higher

Chapter 2. Getting started

This section tells how to first start IBM Cognos Express Advisor.

Express Data Advisor is used to produce a model definition from a relational database, and Express Advisor is used to analyze the definition. For more information about Express Data Advisor, see the IBM Cognos Express *Data Advisor User Guide*.

Maps can be installed at this time or be installed at a later date. Maps give further understanding to geographical or topological data.

Graphics can be installed for use as background images. Graphics can give more emphasis to the information values.

Starting the Express Advisor client

The IBM Cognos Express Advisor client can either be started from the IBM Cognos Express Data Advisor, or from a URL link. If starting from a URL link, each view must be connected to a package and a cube before it can be used.

Note: When you run Express Advisor on Microsoft Windows Server 2008 x64 Edition R2, then you can get the following message: "*An add-on for this website failed to run. Check the security settings in Internet Options for potential conflicts.*". To solve this, you have to add the IBM Cognos Express Server URL to the trusted sites in your internet browser.

Procedure

1. Select the **Welcome to IBM Cognos Express** page.
2. Select **Launch** from the right-hand side of the toolbar.
3. Select **Advisor**.

Making a new view

You can make new view.

Procedure

1. Click the **Views** button on the toolbar tab.
2. Select the location for the new view, **Local Views**, **My Folders** or **Public Folders**.
3. Click **New**.
4. Select **View**.
5. Type the name of the new view.
6. Click **Open**.
7. If you have selected **Local Views** for the view, you must type the server name in the **Server** field in the **Connection Information** dialog box.
8. In the **Connection Information** dialog box, click the  button.
9. In the **Choose Package** dialog box, select a package and click **OK**.
10. In the **Connection Information** dialog box, select a **Database**.

If there is more than one cube in the package, select the cube you want.

11. Click **OK**.
12. In the **Credentials** window, enter your IBM Cognos security credentials to access the server and click **OK**.

    Note: Local Views will not be available when you use Express Advisor on Microsoft Windows Vista with Microsoft Internet Explorer 7 running in protected mode.

Changing connections of a view

After you have made a new view, you can change the connection to a package and a valid cube for the view.

Procedure

1. Click the **Views** button on the toolbar tab.
2. Select a view or folder and click **Open View**. If you click **Open View** when a folder is selected, all views in the folder are opened.
3. Select a Package from the **Database** list on the **Connection Information** window and click **OK**. If there is more than one cube in the package, select the cube.

   Note: Local Views will not be available when you use Advisor on Microsoft Windows Vista with Microsoft Internet Explorer 7 running in protected mode.
4. In the **Credentials** window, enter your IBM Cognos security credentials to access the server and click **OK**.

Opening more connections

You can connect to a different cube or package from the Express Advisor client.

Procedure

1. On the toolbar click the **Connection** button to connect to a different cube or package.
2. On the **Connection Information** window, select the cube or package to change the connection to the server.
3. To clear the credentials, including passwords, for the server, click **Forget Credentials**.

Working with views, folders, and canvases

Views, folders and canvases can be stored either on your own computer, or on the server in the content store.

For information about canvases see, “Dashboards” on page 15. You can create, rename, and delete views, folders, and canvases on the **Views** dialog box.

The **Views** dialog box contains four tabs:

- **Local Views**

  These are views and canvases that are stored locally on your client system.
- **My Folders**

  These are folders available to you on the server. You can access views and make new views here.
- **Public Folders**

These are the shared folders stored in the server repository. You can open a view, but you cannot make a new view or save an open view in the **Public Folders** area unless you have the correct permissions.

- **Open Views**

  These are all the views that are currently open.

The **Views** dialog box shows the following icons:

Icon	Description
	Folder icon
	Package icon
	Open view icon
	Closed view icon
	Canvas icon

Setting the local views location

To change the address of the default folder for Local Views, do these steps.

Procedure

1. Click the **Views** button.
2. Click the **Location** button on the **Local Views** tab.

   The location is the directory on your PC or on your network where your Folders and Views are stored, by default the location is:

   C:\Documents and Settings\<user name>\My Documents\My IBM Cognos Express Advisor\Views
3. Change the location as required.
4. Click **OK**
5. Click **Close**

Making a new view, folder, or canvas

You can make a new views, folders, or canvases.

Procedure

1. Click on the **Views** button.
2. Select where you want to save the view, folder or canvas in either **My Folders** or **Public Folders**.

   Note: You can only make a new view in the **My Folders** location.
3. Click **New**.
4. Choose between:
   - **View**
   - **Folder**
   - **Canvas**

5. Type the new name for the item. This is the final step to make a view, folder, canvas.
6. You can click on the pull-down arrow next to **Views** button on the toolbar to see which views are open, views that have changed since they were opened or saved, can be recognized by an asterisk (*). Click on a view name to activate the View.

Renaming a view, folder, or canvas

You can rename views, folders, or canvases.

Procedure

1. Click the **Views** button.
2. Select which view, folder, or canvas you want to rename.
3. Click **Rename**.
4. Type the new name for the item.

Deleting a view, folder, or canvas

You can delete views, folders, or canvases.

Procedure

1. Click the **Views** button.
2. Select which view, folder, or canvas you want to delete.
3. Click **Delete**.

Saving a view or canvas with a different name

You can save a view or canvas with a different name.

Procedure

1. Click the **Views** button.
2. Select the view or canvas and click open.
3. Click the **Open Views** tab.
4. Select the view or canvas to save.
5. Click **Save As**.
6. Type the new name of the view or canvas.
7. Click **OK**.

Copying a view, folder, or canvas

You can copy views, folders or canvases.

Procedure

1. Click the **Views** button.
2. Select which view, folder or canvas you want to copy.
3. Click **Copy**.
4. Select where you want to save the view, folder or canvas.
5. Click **Paste**.

Go back to the last saved view

You can always return to the view as it appeared when it was last saved.

Procedure

1. Click the **Views** button.
2. Select the view you want to reload and click **Reload**.
3. After clicking **Reload**, the view gets reloaded.

Viewing properties of a view, folder, package, or canvas

You can view properties of views, folders, packages or canvases.

Procedure

1. Click the **Views** button.
2. Select the view, folder, package, or canvas of which you want to view the properties.
3. Click **Properties**.

Chapter 3. Using IBM Cognos Express Advisor

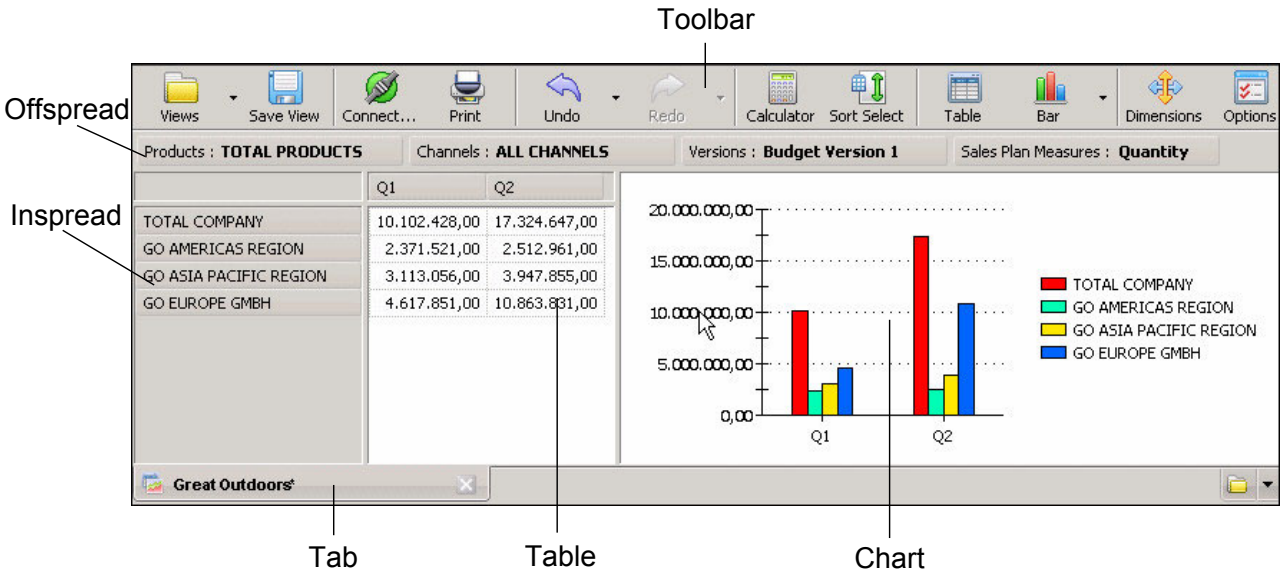
In this section you will find information about using IBM Cognos Express Advisor.

User interface and appearance

The user interface consists of a toolbar, an inspread and offspread section and an area where the table and the chart are displayed. To switch between views you can use the tab bar. You can change the appearance by setting gradients or by zooming in on data.

You can change the appearance of IBM Cognos Express Advisor by setting:

- The theme
- Gradient backgrounds



Toolbar

The toolbar has buttons with which you can perform actions.

Button	Purpose
	Manage views via the views dialog.
	Save a view or canvas.
	Open the connection dialog to manage the connection to the data source.

Button	Purpose
	Print a view, e-mail a view as a PDF or save a view as a PDF.
	Undo the last action or actions.
	Redo the last action or actions.
	Create calculations in a view.
	Sort and select members.
	View the data as a table.
	View the data as a chart.
	Set the dimensions, the offspread members and the print range for the offspread members.
	Set the options.
	Display the on-line help.

Changing the toolbar layout

You can change the appearance of the toolbar.

Procedure

1. Right-click the toolbar.
2. Select or deselect the options **Large Buttons** or **Text on Buttons**.

Theme settings

You can change the way a view looks by either manually changing the individual items, for example colors and fonts, that are used or by specifying a theme.

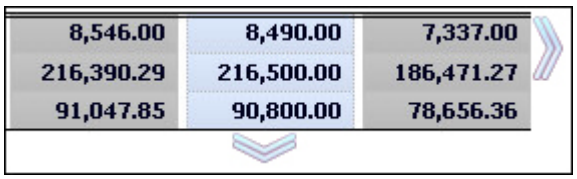
A theme offers a predefined set visual settings. There are several themes from which to choose from.

You change the theme by specifying it via the IBM Cognos Express Advisor Dispatcher.

Setting the data window

The number of rows and columns that appear in the table depend on the selected members of the inspread dimensions.

In order to enhance the performance of a view, the number of rows and columns can be set to a maximum. The default values are 1000 rows and 250 columns. If there are more rows or columns to be shown than the specified rows and columns, arrows that indicate there are still more rows and columns.



Changing the data window

You can change the data window by using the arrows on screen.

Procedure

1. Click the arrows to expand the rows or columns by the specified amount.
2. Shift-click the arrows to show all rows or columns. The number of rows and columns now depends on the selected members of the inspread dimensions.

   Note: When printing or exporting to MicrosoftExcel the data window setting is ignored. All rows and columns are processed.

Setting the number of rows and columns for the data window

You can specify the number of rows and columns that are displayed.

Procedure

1. Open the **Options** dialog box.
2. Click the **Data** tab.
3. In the **Data Window** section of the tab, enter the number of rows and columns that you want visible in the Data Window table.

   If you want to display all available rows and columns in the data Window table, enter 0 for both **Rows** and **Columns**.

Choosing Alias Tables

You can choose between available alias tables in a view. You do this via the Choose Alias Tables dialog box.

Procedure

1. To open the **Choose Alias Tables** dialog box either:
   - Right-click the view tab and choose **Database** > **Choose Alias Tables** or
   - Right-click a cell in the view and choose **Extra** > **Choose Alias Tables**
2. In the **Choose Alias Tables** dialog box move the alias tables from the **Available Alias Tables** list to the **Selected Alias Tables** list.

Changing the order of stacked alias tables

If there are multiple alias tables available in the database, you can change the order in which the alias tables are used.

The following rules apply for the assignment of aliases to member names:

- The order in which the tables in the **Selected Alias Tables** list are used, is from top to bottom.
- If an alias table has no alias defined for a member, the next alias table in the **Selected Alias Table** list will be used.
- The member name is used if there is no alias for that member in any of the selected alias tables.

Procedure

1. Open the **Choose Alias Tables** dialog box.
2. Use the up and down buttons to change the order in which the alias tables are used.

   This enables you to use combinations of alias tables to assign aliases to member names.
3. Click **OK** to confirm the settings for alias tables.

   Note: Express Advisor uses unique member names. The unique member names are displayed when all alias tables are moved to the **Available Alias Tables** list.

Changing the backgrounds of headers and cells

You can use gradient backgrounds to change the appearance in headers and cells.

The headers are the areas in the view that show the names of the dimensions and members. The cells show the actual data.

Procedure

1. Open the **Options** dialog box.
2. Click the **Format** tab.
3. In the **Background** section, you can choose whether you want the cells and headers to use gradient colors.

Changing the zoom percentage

In order to enlarge the view, you can set the zoom percentage.

Only data in the cells can be zoomed into. Charts are not affected by changing the zoom percentage.

The zoom factor is independent of the formatting applied (for example the font size).

Procedure

1. Open the **Options** dialog box.
2. Click the **Layout** tab.
3. Set the Zoom Percentage. You can use values from 10 to 400%. The default value is 100%.

Displaying database notes

Database notes can be used to display information about the status of the database and its contents. The OLAP administrator or supervisor can add database notes to the OLAP Database.

Procedure

Right-click in a view and choose **Extra** > **Database Notes.**
The database notes and description will be displayed.

Adding notes to a view

A view has a note if there is a paperclip icon in the top right corner of your screen.

Procedure

1. To add, view, or change notes on your view, right-click in the table and click **Extra** > **Notes**.
2. Type your comments about this view.
3. To see the note, click the **Properties** button on the **Views** window. You can also read the note by moving your pointer over the paperclip icon.
4. To delete a note, remove the contents of the note and close it.
5. Optionally, right-click the table and click **Options** and then click the **Layout** tab to change the layout of a note.
6. Optionally, right-click the table and click **Options** and then click **Format** to change the font type, size, and style as well as the text and background color.
7. To include notes when printing a view, click the **Print** tab in the **Options** window and select **Print View Notes**.

Enabling audit reports

You can keep an audit report in a view in order to see a description of the actions performed to achieve the current member selection.

The audit report gives an explanation of the current view. It is not meant to be a log file of the actions performed in a view. It allows you to verify the interpretation of the report.

Initially the following information is shown:

- Database, Server and User, including date and time
- Inspread and offspread selections as well as hidden dimensions
- Date and time of data retrieval
- Relevant options, such as group size, decimal separator and Thousand separator

All information that is necessary to understand the way the current view was created is added to the audit report.

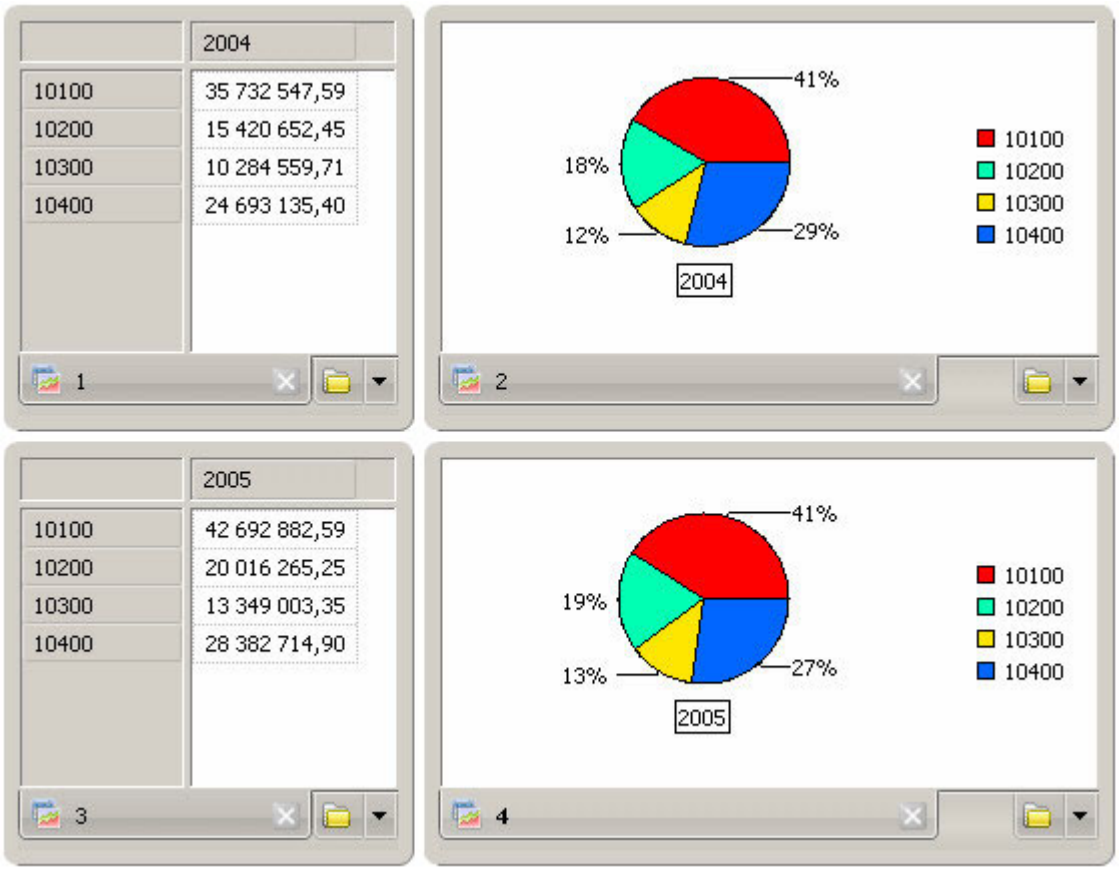
Procedure

1. On the **Data** tab of the **Options** window, select **Audit Report**.
2. To view the audit report, right-click the table and click **Extra** > **Audit Report**.
   The **Audit Report** dialog box is displayed.
3. To reset the audit report, click the **Reset** button on the **Audit Report** dialog box. The list of Undo actions are also reset.

Dashboards

A dashboard is built on a canvas that contains panels. The panels contain views that can communicate with each other, enabling you to create dashboard applications.

The following illustrations shows a dashboard with four panels that contain views.



Creating a canvas

This section explains you how to create a canvas.

Procedure

1. On the toolbar click the **Views** arrow button and then click **Create Canvas**.

   The new canvas contains one panel. For information on how to add more panels to the canvas, see "Adding panels" on page 17.
2. You can do the following:
   - To prevent the panel from changing size or position, click the **Views** arrow button on the toolbar and then click **Lock Panels**.
   - To change the position of the panel, click and drag the handle of the panel.
   - To change the size of the panel, click and drag the borders of the panel.
   - To automatically arrange the panels, click the **Views** arrow button on the toolbar and then click **Auto Arrange Panels**.

Saving a canvas

Use the following instructions to save the canvas.

Procedure

You can either

- Save the canvas with its current name by clicking the **Save Canvas** button.
- Save the canvas with a different name by clicking the **Views** arrow button on the toolbar, and then clicking **Save Canvas As**.

Adding panels

To add more panels to the canvas, you must create or open views.

Procedure

1. Create or open a view on the canvas. For more information, see "Starting the Express Advisor client" on page 5.
2. Right-click on the view tab, and then click **Move View to New Panel**.

Closing a panel on the canvas

You can close an unwanted panel.

Procedure

In the unwanted panel, click the **Show all open Views** arrow button and then click **Close Panel**.

Synchronization between panels

You can synchronize views in different panels. For example, you can synchronize between a table and charts that are based on the same data on different panels.

Note: To synchronize views between panels, the panel views must connect to the same data source.

You can specify synchronization between panels after changes in the offspread, the inspread, or in both.

You can select the panels that synchronize with each other by specifying a channel. The default channel is called Default. If you have more than two panels and you want to prevent the synchronization from always using the same channel, then you must specify another channel.

Procedure

1. In a panel, click the **Show all open Views** arrow button and then click **Panel Options**.
2. On the **Selections** tab, select the trigger to synchronize:
   - **Synchronize Offspread Selections**
   - **Synchronize Inspread Selections**
3. In the **Using Channel** box, specify the channel for the communication between the panels.

   Note: You must specify the same synchronization options in all panels that you want to synchronize.

Display options

You can change the look and feel of both the canvas and the panels.

For example,

- You can specify whether you want the offspread or tab bar to display in the panels.
- You can specify that the panels inherit the display options.
- You can specify the color of the background or a background image for the canvas.

Display Components

Use this option to select or clear the respective display component. The following components are available:

- Offspread
- Table
  - Row Headers
  - Column Headers
  - Splitters
  - Data Entry Panel
- Chart Bar
- Drill Through Bar
- Notes
- Tab Bar

Border

Use this option to specify the size and style of the border panel. The following border options are available:

- Padding
- Adornment

Background

Use the background options to specify the background color, or an image for the canvas. The following background options are available:

- Color
- Image
- Image Mode

Image Alignment

Use the image alignment options to set the position of the image. The following image alignment options are available:

- Horizontal
- Vertical
- Offset

Setting the display options for the canvas

The display options that you set for the canvas is applied to all panels on the canvas.

Except for the image and background color because these only apply to the canvas. You can change the display options of each panel individually.

Procedure

1. On the toolbar click the **Views** arrow button , and then click **Canvas Options**.
2. On the **Display** tab, set the display options for the canvas.

Setting the display options for the panels

The display options that you set for the canvas are applied to all panels on the canvas. You can change the display options of each panel individually.

Procedure

1. In a panel click the **Show all open Views** arrow button , and then click **Panel Options**.
2. On the **Display** tab, set the display options for the panel.

Adding a background image to a canvas

You can add an image, that is stored in a location available to Express Advisor client, as a background image to a canvas.

Note: For information about making images available to Express Advisor client, see the *Managing IBM Cognos Express* guide.

Procedure

1. On the toolbar click the **Views** arrow button , and then click **Canvas Options**.
2. Click the **Display** tab.
3. From the **Image** menu select an image.
4. Choose an **Image Mode**:
   - To display the image in its original size, select **Normal**.
   - To display the image in its original size and repeat it so that it fills the available space in the window, select **Tile**.
   - To stretch the image to fill the window size, select **Stretch**.
   - To stretch the image while maintaining the aspect ratio, select **Stretch Ratio**.
5. To move the image, set the **Image Alignment** using the **Horizontal** and **Vertical** boxes and corresponding offsets.

Results

The canvas appears with a background image.

Navigation

There are many ways in which you can navigate through your data in a view. You can switch between dimensions and change the order of dimensions.

You can modify a view by dragging and dropping dimensions from one location to another in a view.

Swapping dimensions

You can drag a dimension from the inspread area and drop it on the offspread area. The member that you move remains selected.

Similarly, you can drag a dimension from the offspread area and drop it on the inspread area. When dragging a dimension to the inspread area, the previous member selection in that dimension displays. You can move dimensions without losing member selections.

When you drag a dimension from one location in a view and drop it directly on top of another dimension, the two dimensions switch positions in the view.

You can also drag and drop dimensions in a chart.

Procedure

1. Click the dimension that you want to move.
2. Drag and drop the dimension to a different location in the view.

   The swap icon  appears next to your mouse pointer.

Stacking dimensions

In a view you can display multiple dimensions on either the rows or columns. This is called stacking dimensions.

Stacking dimensions allows you to see greater detail in a view, as each stacked dimension can display multiple members.

Note: For asymmetric selections see the section "Asymmetric selection" on page 22.

Stacking dimensions

Follow these steps to stack multiple dimensions in a view.

Procedure

1. Click the dimension that you want to stack.
2. As you move your pointer over the current dimension, the mouse cursor changes and a line appears showing where the dimension will be inserted. You can move the cursor until the line appears in the desired position.
3. Release the mouse button to drop and stack the dimension.

Renaming dimensions

If you want to change the display name of a dimension you can rename it. You can change only the display name and not the actual name of the dimension.

Procedure

1. Open the **Dimensions** dialog box by clicking the **Dimensions** button  on the toolbar.
2. Identify the dimension you want to rename and click **Rename**.

The **Change Dimension Display Name** dialog box opens.

3. Change the dimension name and click **OK**.

   In the **Dimensions** dialog box the new display name precedes the actual name of the dimension:

   renamed display name [actual dimension name]

   If you want to remove the display name and thus only show the actual name of the dimension, click remove while the **Change Dimension Display Name** dialog box is open.

Showing and hiding dimensions

You can use the Dimensions dialog box to determine which dimensions are visible on your screen.

Opening the dimensions dialog box

Procedure

Right-click the table, then click **Dimensions**.
The **Dimensions** dialog box displays. This dialog box contains three tabs:

- **Dimensions** shows all used and ignored dimensions
- **Offspread** shows all offspread dimensions
- **Print Range** is used to configure printing. See the section Printing Views for more information.

Setting used and ignored dimensions

Follow these steps to set used and ignored dimensions for a table.

Procedure

1. Right-click the table, then click **Dimensions**.

   The **Dimensions** dialog box displays.

2. Click the **Dimensions** tab.
3. For each dimension that you want to use, select the dimension name then click **Use**.

   Alternatively, you can click **Use All** to use all dimensions shown in the list.

4. For each dimension that you want to ignore, select the dimension name then click **Ignore**.
5. If you want to remove your selections and restore the original used/ignore status for each dimension to what it was when you opened the database, click **Reset All**.
6. Click **Apply** to immediately apply your changes to the table.

Setting offspread dimensions

Follow these steps to set offspread dimensions for a table.

Procedure

1. Right-click the table, then click **Dimensions**.

   The **Dimensions** dialog box displays.

2. Click the **Offspread** tab.

This tab displays a list of shown and hidden offspread dimensions. The shown dimensions  appear at the top of the list in the order specified by the user, followed by the hidden dimensions  in alphabetical order.

3. For each dimension that you want to show in the Offspread area, select the dimension name then click **Show**.

   Alternatively, you can click **Show All** to show all dimensions in the list.
4. For each dimension that you want to hide, select the dimension name then click **Hide**.
5. To change the position of a shown dimension in the list, select the dimension name then click the **Up** or **Down** arrow.
6. To change the selected member for any Offspread dimension, click the dimension name, then click **Select**.

   The **Select Offspread Member** dialog box appears.
7. Choose the member you want, then click **OK** to set the member and close the **Select Offspread Member** dialog box.
8. If you want to discard your selections and restore the original show/hide status for each dimension to what it was when you opened the database, click **Reset All**.

   Note: **Reset All** does not reset the order of dimensions.
9. Click **Apply** to immediately apply your changes to the table.

Undoing previous actions

You can undo and redo multiple actions in a view.

You should be aware of the following limitations when using the Undo and Redo features:

- The **Undo** and **Redo** buttons do not apply to changes made in a dialog box, such as creating a calculation or changing options on the **Options** dialog.
- Undo and Redo operations are lost when reconnecting to a different database.

To undo or redo more steps in one action, use the pull down arrows next to the **Undo** and **Redo** buttons. A list of the last ten actions is shown. By clicking the appropriate action, you undo or redo multiple actions.

Procedure

1. To undo the most recent action, click **Undo**  .
2. To reapply an undone action, click **Redo**  .
3. To undo or redo multiple actions, click the pull down arrow next to either the **Undo** or **Redo** button, then click the desired action. All actions that appear above the selected action will also be undone/redone.

Asymmetric selection

When dimensions have been stacked, it is possible to make an asymmetric selection.

See “Stacking dimensions” on page 20 for an explanation of stacked dimensions. An asymmetric selection allows you to show only those members in which you are interested.

For example, if you want to change the products that are shown only for a region you create an asymmetric selection.

		Total Year
GO AMERICAS REGION	Cooking Gear	1.152.019,00
	Lanterns	2.276.321,00
	Packs	646.254,00
	Sleeping Bags	625.119,00
	Tents	1.136.221,00
GO ASIA PACIFIC REGION	Cooking Gear	666.976,00
	Lanterns	1.116.305,00
	Packs	272.113,00
	Sleeping Bags	195.706,00
	Tents	356.904,00

symmetrical selection

		Total Year
GO AMERICAS REGION	Cooking Gear	1.152.019,00
	Sleeping Bags	625.119,00
	Tents	1.136.221,00
GO ASIA PACIFIC REGION	Cooking Gear	666.976,00
	Lanterns	1.116.305,00
	Packs	272.113,00
	Sleeping Bags	195.706,00
	Tents	356.904,00

asymmetrical selection

There are several ways to create asymmetric selections:

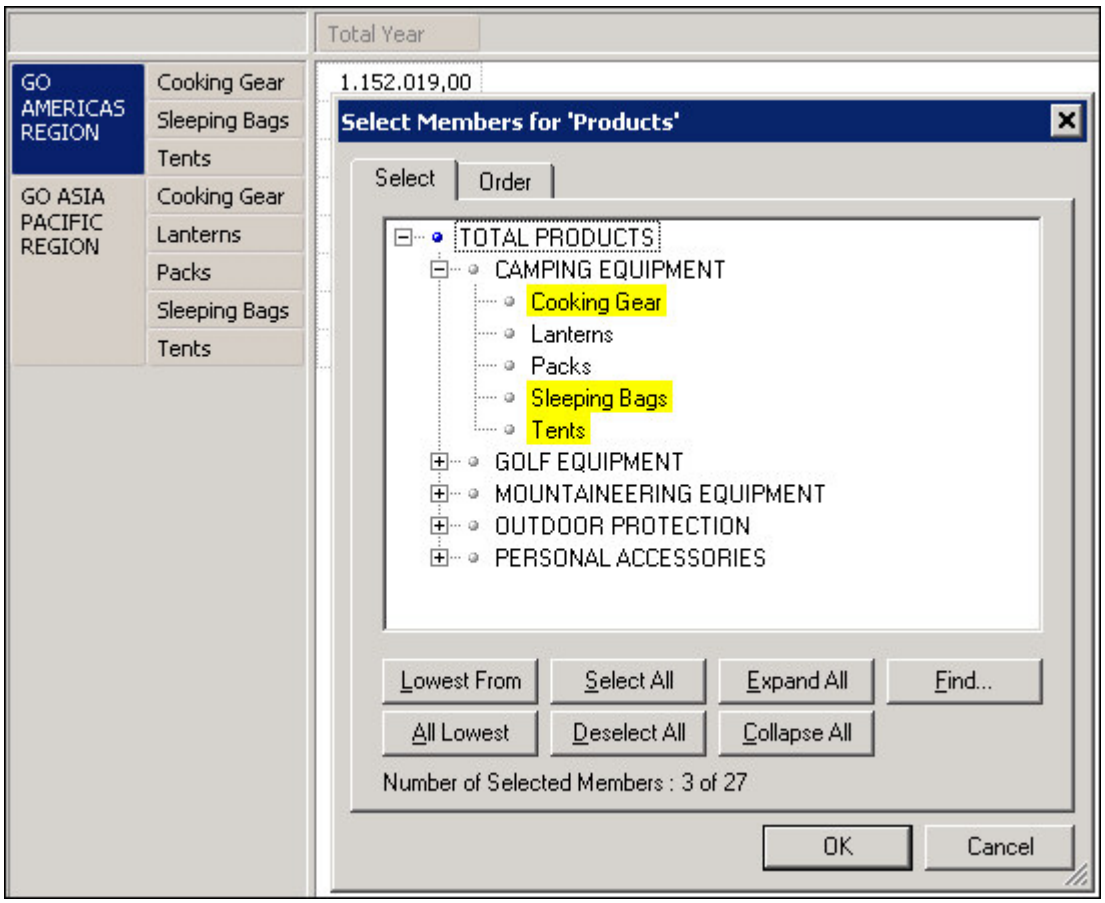
- Using the **Select Members** dialog box
- Drilling up and down on members while holding the Alt key

Using the Select Members dialog box to create an asymmetric selection

You can create an asymmetric selection by using the Select Members dialog box.

Procedure

1. Click the stacked dimension for which you want to create an asymmetric selection. The **Select Members** dialog box is displayed. Double clicking, or pressing the Alt key when clicking on any of the members behind the stacked member will open the **Select Members** dialog box.



2. You can change the member for which you want to create the asymmetric selection by clicking on that member. The member that will have an asymmetric selection is indicated by a different color. See the image above.
3. In the **Select Members** dialog box change the selected members to create the asymmetric selection.
4. Click **OK**.

   The asymmetric selection is displayed.

Creating an asymmetric selection by drilling up and down on members while holding the Alt key

You can create an asymmetric selection by drilling up and down on members while holding the Alt key.

Procedure

1. Identify the stacked dimension for which you want to create an asymmetric selection.
2. Hold the Alt key and click either the up or the down arrow to the right of the member names.

   The asymmetric selection is displayed.

Creating an symmetric selection

If you want the selection to be asymmetric, no group should be selected.

Procedure

1. Click the asymmetric group. The **Select Members** dialog box is displayed.

   Only the asymmetric group is selected.
2. Click the asymmetric group.

   In the **Select Members** dialog box the members for the original symmetric selection are selected.

   If you now change the member selection, a symmetric selection for all combinations will be made.

Changing the order of members in an asymmetric selection

If you want members in an asymmetric selection to be in a different order than the symmetric selection, you can change their order.

Procedure

1. Press and hold the Alt key and click the member you want to move in the asymmetric selection.
2. Drag the member to the place where you want it to go. The following options are available:
   - Move the member between two other members. For moving the member your mouse cursor should look like this:  .
   - Replace the member with another member. You have to press both the Alt and the Shift key while dragging the member. For replacing the member your mouse cursor should look like this:  .

Drill through

Drill through allows you to drill through to the relational data sources, which are used to populate the multidimensional database.

Setting drill through options

Follow these steps to enable drill through and set several options that determine the appearance and behavior of a drill through.

Procedure

1. Click the **Options** button on the toolbar.
2. Click the **Layout** tab on the **Options** dialog box.
3. Select the **Show Drill Through** option.
4. Using the adjacent pull down menu, select the location where you want the Drill Through table to appear on the screen.
5. Click the **Actions** tab.
6. Set the Drill Through options, as described below.
7. Click **OK**.

Option	Description
Highlight Active Cell	Highlights the active cell (the cell for which the drill through data is shown) in the main table.

Option	Description
Color Alternating Rows	Applies a background color to alternating rows in the drill through table to improve readability. When you select this option, you must also specify the number of adjacent rows to which background coloring should be applied.
Limit Rows	Limits the number of rows to display in the drill through table. When you select this option, you must also set a maximum row value.
Print All Combinations	If this option is selected, all combinations of the data for every cell in the table will be printed.
Limit Rows Printed	Limits the number of drill through table rows that can be printed. When you select this option, you must also specify the maximum number of rows that can be printed.
Currency Settings	Displays a currency symbol for values in the drill through section. The following values are possible: **None** No currency symbol is shown. **Auto** If you select the value **Auto**, then the regional settings of the system, on which the client software runs, are applied. **The name of a region** If you specify a region, then the currency of that region is displayed for values in the drill through section.

Using drill through

This feature allows you to drill through to relational data.

Procedure

Right-click a cell in the data table, then click **Cell Actions** > **Drill Through**. A drill through pane appears showing the table of this relational data.
A drill through script can be selected.
Only Relational scripts will work when using Drill Through. View scripts will not work.

Drilling through relational data

Drilling through relational data allows you to display a drill through pane that shows the table of the relational data. The drill through pane gives you information about how values in the view are derived from the relational data.

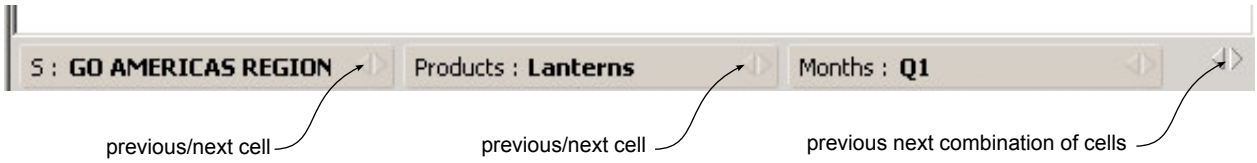
Procedure

1. Right-click a cell, then click **Actions** > **Drill Through**.

The Drill Through table displays in the location set by the **Show Drill Through** option.

2. Click any cell in the data table to view the associated relational data in the Drill Through table.
3. To view the next or previous cell for a particular member, click the arrow buttons .

   To view the next or previous cell for all members, click the arrow buttons on the bottom right of the drill through table.



Formatting the drill through table

You can change the way the drill through table is displayed by changing its format.

Procedure

1. Right-click the Drill Through table, then click **Formatting** > **Styles**.
2. Click **Drill Through**.
3. Set formatting options for font type, background color, borders, and so on.

Modifying columns in the drill through table

You can change the position of columns in the drill through table, and set display properties for columns.

Procedure

1. To change the position of a column in the drill through table, click the column heading, then drag and drop the heading to a new position.
2. To set display properties for columns, click the **Columns** button on the drill through table.

   The **Drill Through Columns** dialog box displays.
3. Use the options on the dialog box to:
   - Rename a column
   - Change the alignment
   - Change the order of the columns
   - Show all columns
   - Hide all columns
   - Reset all columns
4. Click **OK**.

Copying data from the Drill Through table

You can copy the rows with relational data to the clipboard.

Procedure

1. To copy all rows of relational data to the clipboard, click the **Copy** button *without* selecting any rows in the table.
2. To copy specific rows to the clipboard, press and hold the Ctrl key and click each row you want to copy, then click the **Copy** button.

Canceling long running processes to an IBM Cognos TM1 9.5 database

A cancellation of process is made available for IBM Cognos Executive Viewer when used with IBM Cognos TM1® 9.5.

About this task

IBM Cognos TM1 version 9.5 has a cancel feature that can cancel long running processes. During a process in IBM Cognos Executive Viewer, the following notice can appear:

Please wait while the operation is in process. To cancel the operation, press the Escape key.

Procedure

To cancel the operation, press the Escape key.

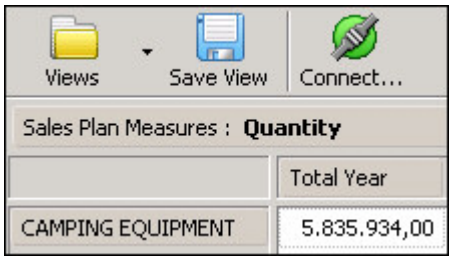
Members

The selected members determine the data that is displayed. The charts also are dependent on the selected members.

Initial member selection

When a database is initially opened, one dimension is placed on the columns and one dimension is placed on the rows.

This is referred to as the *inspread* selection. All other dimensions are placed in the *offspread* area. In the following image, the members *CAMPING EQUIPMENT* and *Total Year* are part of the inspread selection. The dimension *Sales Plan Measures: Quantity* is part of the offspread area.



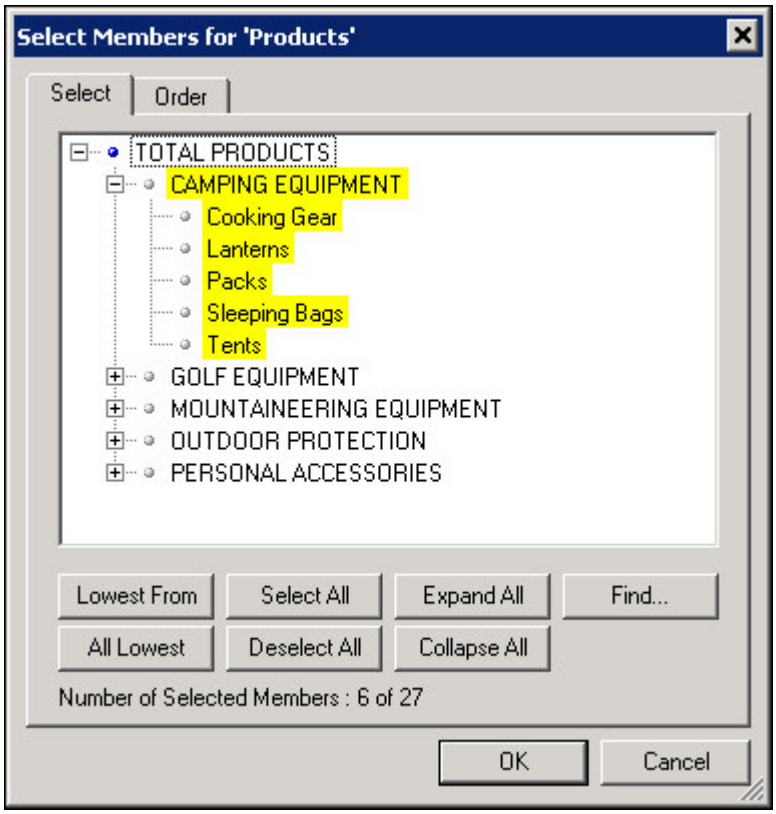
When a database is opened, IBM Cognos Express Advisor checks if a time and a measures (or account) dimension are available. If these dimensions are available, the time dimension is placed on the columns and the measures (or account) dimension is placed on the rows. The first level of children of these dimensions is selected.

If no time and no measures (or account) dimensions are available, the first dimensions in the OLAP database outline order on the rows and the columns are displayed. The other dimensions are placed in the offspread area. The members selected in these dimensions are the default members.

Depending on the database, a default member can be set for a dimension. Otherwise, the default member is the top-level member, unless this member is a label. In that case, the first child member that is not a label will be displayed in the view.

Selecting individual members

You can use the Select Member dialog box to select new dimension members, which allows you to change or expand your view of data in the data window.



Procedure

1. Click a member (either inspread or offspread) in the data window.

   The **Select Members** dialog box displays, showing the parent dimension of the member that you clicked. Selected members are highlighted.
2. To select a member, click its name.

   When you click a member that has children then click the + symbol next to the member name, all children of the member are automatically selected.

   Click the **-** icon to collapse children of the member under the **-** icon.

   Click **Expand All** to expand the children of all members.

   Click **Collapse All** to collapse the children of all members.
3. Click **Select All** to select all members of the dimension.

   Click **Deselect All** to clear all selections.
4. Click **All Lowest** to select all the lowest (leaf) members of the dimension.
5. To select all the lowest members below a specific parent member, click the desired parent member, then click **Lowest From**.

Note: When using the **Select All**, **All Lowest**, and **Lowest From** buttons to select members, shared members are not selected.

Selecting members by group

If you want to select all members that have similarities you can select those members by group.

Procedure

1. Click a member in the Data Window.

   The **Select Members** dialog box displays, showing the parent dimension of the member that you clicked.
2. Right-click a member in the **Select Members** dialog box.
3. Select a group by clicking one of the selection options, as described in the following table.

   Note: When selecting a group of members, shared members are selected as well.

Selection Option	Description
Select Children	Selects members one level below the current member.
Select Descendents	Selects all members, without regard to level, below the current member.
Select Lowest	Selects the lowest members below the current member.
Select Ancestors	Selects all members above the current member.
Select Siblings	Selects members of level of the current member *that share the same parent* as the current member.

Showing member names and aliases

Both OLAP server member names and alias names can be displayed in a row or column at the same time.

Procedure

1. Click the **Options** button on the toolbar.
2. Click the **Headers** tab on the **Options** dialog box.
3. Select either or both of the following options:
   - **Member Names and Aliases in Rows** to display both member names and aliases in rows
   - **Member Names and Aliases in Columns** to display both member names and aliases in columns
4. Click **OK**.

   The row and/or column headers now display the member names as well as member aliases.

Subsets

A subset is a definition of members for a specific dimension. Subsets are used to narrow the number of rows and columns.

Finding subsets

You can use the Find Members dialog box to locate and select members based on certain criteria.

Procedure

1. Click on a member to open the **Select Members** dialog box > **Find**.
2. In the **Find Members** dialog box, click **Subsets**.
   If subsets are available for a dimension, the **Subsets** option is enabled.
3. Click the pull-down menu and select the subset you want to search.
4. Click **Find** to locate the first member in the selected subset.
5. Click **Find** again to locate the next member in the selected subset.
   You can also click **Find All** to find all members in the subset at once.

   Note: Only subsets that contain members from a single dimension are searched for.

Drill up and down

Members can consist of parents, children, ancestors or siblings. In order to analyze the data in a view you can choose to display less or more members of the inspread members. This is called drill up or drill down.

In a view you can use the *Easy Drilling* arrows to drill up and down on members. This increases the speed of changing the displayed members.

Drilling down

Drill down on a member to display the children of an inspread member.

Procedure

1. Right-click the inspread member.
2. Click **Drill Down**.

Drilling up

Drill up on a member to display the parent of an inspread member.

Procedure

1. Right-click the inspread member.
2. Click **Drill Up**.

Easy drilling

Easy drilling allows you to drill up or drill down on an inspread member with a single mouse click.

Enabling easy drilling:

In order to use easy drilling you have to enable it in the Options dialog box.

Procedure

1. Open the **Options** dialog box.
2. Click the **Headers** tab.
3. Click one of these Easy Drilling options:
   - **No Drill Buttons** removes the drill buttons from the inspread members. Easy drilling is disabled.

- **Hover Drill Buttons** displays drill buttons on members only when you move the pointer over a member name. This is the default setting.
- **Permanent Drill Buttons** permanently displays drill buttons on inspread members.

4. Click **OK**

Options for easy drilling:

You can specify whether easy drilling expands up or to parents only.

You can set the following additional options for easy drilling:

- **Expand Up**

  By default, when you right-click a hover drill button to drill down, the children of the member are inserted after the parent member. With the option **Expand Up** selected, the children of the parent will be inserted before the parent member instead of after when you right-click on the hover drill button.button to drill down.
- **Drill Up To Parent Only**

  By default, when drilling up on a member, the selection one level higher than the level that is selected is displayed. With the option **Drill Up To Parent Only** checked, you can drill up to the single parent member of a selection on screen when clicking the hover drill button to drill up.

Using easy drilling:

When Easy Drilling is enabled, an up and or down arrow displays next to inspread members, indicating that you can drill up or down.

Procedure

If you have enabled hover drill buttons, move over an inspread member and click an up arrow  to drill up, or a down arrow to drill down.
If you have enabled permanent drill buttons, just click a visible arrow on an inspread member.
The following right-click options are also available when easy drilling is enabled:

- If you right-click a hover drill down button, the member and the children of a member are included.
- If you right-click a hover drill up button, the children of a member disappear.
- If you right-click a hover drill up button on a member with no children, the parent member is selected.
- When right-clicking on a level 0 member, the member and its siblings will disappear.

Member information

The Member Information dialog box displays the properties or attributes of the member, formula (from both the database and the view), a comment, and additional information about the member.

Additional information can include:

- Level names
- Consolidation types
- Original member name

- Share information
- Expense tags
- Time Balance information
- Number of children and descendants

Showing member information

You can show information for each member.

Procedure

Right-click a member name, then click **Member Information** on the shortcut menu. The Member Information dialog box displays, showing detailed member information.
Alternatively, you can move the pointer over a member name to view a tooltip containing member information.

The order of members

The default order by which the members are displayed are determined by the outline. In a view you can change the order of members.

Changing the order of members by dragging and dropping

You change the order of members by moving the members from the initial location to a new location.

Procedure

1. Click and hold a member.
2. Drag the member to the place where y0u want it to go. The following options are available:
   - Move the member between two other members. For moving a member your mouse cursor should look like this:  .
   - Replace the member with another member. You have to press either the Ctrl key or the Shift key while dragging the member. For replacing a member your mouse cursor should look like this:  .

Changing the order of members by using the Select Members dialog box

You can change the order of members by using the Select Members dialog box.

Procedure

1. Click a member.

   The **Select Members** dialog box displays.
2. Click the **Order** tab.
3. Click the member that you want to move.

   Click the up or down arrow buttons  to move the selected member to its new position.

   You can select multiple members and change their order.

   Note: Changing the order of members is not possible in combination with a DynaSelect.

Sorting the order of members

There are several ways to sort the order of members.

All sorting options are available in the **Select Members** dialog box.

Procedure

1. Click a member in the data window.

   The **Select Members** dialog box displays.
2. Click the **Order** tab.
3. To sort members alphabetically, click the **Sort** button.
4. To apply a different sort order, click the down arrow on the **Sort** button and select one of the available options.
5. Click **OK**.

Option	Description
Outline Order	Sorts members according to the outline order in the OLAP database.
Reverse Outline Order	Sorts members in a reverse way according to the outline order in the OLAP database.
Sort	Sorts members alphabetically.
Reverse Sort	Sorts members in reverse alphabetic order.
Sort within Hierarchy	Sort members in ascending or descending order, while respecting the dimension hierarchy.
Reverse Sort within Hierarchy	Members are sorted in reverse alphabetical order within their hierarchies.

Sorting members within a hierarchy

Sort within hierarchy means it is possible to sort a dimension in ascending or descending order, while respecting the dimension hierarchy.

The **Sort within hierarchy** option is only available while sorting in ascending or descending order.

Procedure

1. Click the **Sort Select** button on the toolbar.

   The **Sort & Select** dialog box displays.
2. Click **Sort within Hierarchy** when performing a sort action.
3. Click **OK**.

   If the dimension is sorted, the children are sorted underneath their parents. In the result, the dimension hierarchy is still intact.

Sorting members by value

Members can be sorted in ascending or descending order according to the values in rows or columns.

Procedure

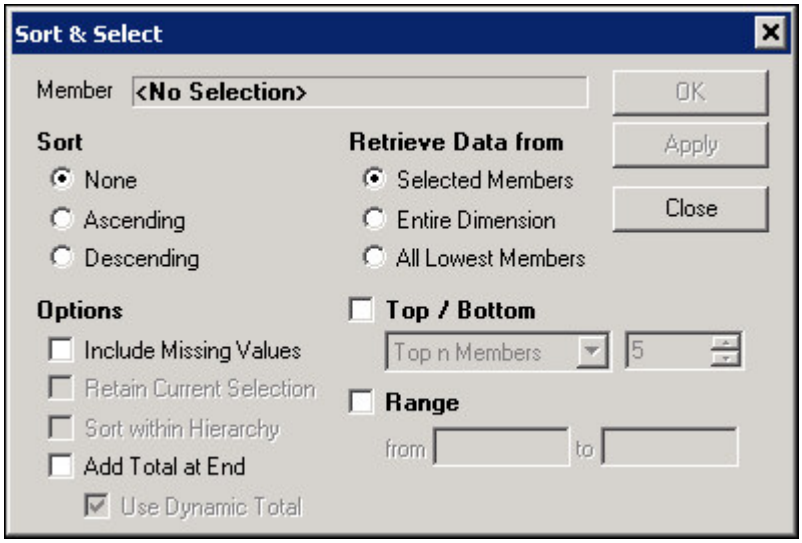
1. To sort row members according to values in a specific column, right-click the column, then click **Sort Ascending** or **Sort Descending**.
2. To sort column members according to values in a specific row, right-click the row, then click **Sort Ascending** or **Sort Descending**.

Sort and select members

To display the data in a view you want to analyze, you can select the members.

If you only want to sort members in an ascending or descending way please see Sorting members by value.

In addition to sorting members in ascending or descending order you can use the sort and select functionality in a view. Sorting and selecting data is done in the **Sort & Select** dialog box.



Sorting and selecting members

If you want to sort and select members, then you must display the Sort & Select dialog box.

Procedure

There are two ways of displaying the **Sort & Select** dialog box:

- Click the **Sort Select** button on the toolbar.
- Right-click in a view and choose **Sort and Select**.

  If you right-click an inspread member the **Sort & Select** dialog box will be displayed with the member you right-clicked on selected in the **Member** field.

  Otherwise the **Member** field will display *<No Selection>*.

  If the **Member** field displays *<No Selection>*, you can click an inspread member to select a member.

Sort and select options

The Sort & Select dialog box offers several options to sort and select the members you want to analyze in a view.

The following options are available:

- Sort
- Options
- Retrieve Data from
- Top / Bottom
- Range

Setting the way to sort members

The Sort section in the Sort & Select dialog box allows you to specify how the members are sorted.

Procedure

1. To open the **Sort & Select** dialog box, click the **Sort Select** button on the toolbar.
2. In the **Sort** section specify how you want the selected members to be sorted. The option are:
   - **None**
   - **Ascending**
   - **Descending**

Setting sort options

The Options section on the Sort & Select dialog box allows you to set certain options.

Procedure

1. To open the **Sort & Select** dialog box, click the **Sort Select** button on the toolbar.
2. In the **Options** section specify how you want the selected members to be sorted. The options are:
   - **Include Missing Values**

     Use this option to display a list of members that have missing values in the database. For example, it can be used in your search to include customers who did not buy products or products that did not sell in a given period.
   - **Retain Current Selection**

     This option allows you to sort on a member and keep your current selection at the same time.
   - **Sort within Hierarchy**

     This option allows you to sort a member in ascending or descending order, while respecting the hierarchy of the dimension.

     If the member is sorted, the children are sorted underneath their parents. In the result, the hierarchy of the dimension is not changed.

     Note: The **Sort within Hierarchy** option is only available when sorting in **Ascending** or **Descending** order.
   - **Add Total at End / Use Dynamic Total**

     If you want to display the static total for all members, select this option. Select the **Use Dynamic Total** if you want the total to change when the selected members change. If the selection contains stacked dimensions, the added total has to be dynamic.

Note: When you perform a new sort action, the total at end will be replaced. If you want to keep the calculation, rename it.

Specifying where to retrieve data from

The Retrieve Data from section in the Sort & Select dialog box allows you to specify from what members the data should be used from.

Procedure

1. Click the **Sort Select** button on the toolbar.

   The **Sort & Select** dialog box displays.
2. In the **Retrieve Data from** section you can specify from what members the data should be used. The options are:
   - **Selected Members**

     If you select this option, the selected members will only change if other criteria on the **Sort & Select** dialog box are met.
   - **Entire Dimension**

     If you select this option, all members in the dimension will be selected.
   - **All Lowest Members**

     If you select this option, all lowest members in the dimension will be selected.

Selecting the top or bottom members, percentages, or values

The Top / Bottom section in the Sort & Select dialog box allows you to select the members that meet one certain criteria.

The following criteria are available:

- Top or bottom members
- Top or bottom percentages
- Top or bottom values

Procedure

1. Click the **Sort Select** button on the toolbar.

   The **Sort & Select** dialog box displays.
2. In the **Top / Bottom** section you can specify the following options from the drop-down menu in combination with the value field:
   - **Top n Members**

     This option allows you to specify a number of members with the highest values. **N** in the drop-down menus is the variable that represents the number of members.
   - **Bottom n Members**

     This option allows you to specify a number of members with the lowest values. **N** in the drop-down menus is the variable that represents the number of members.
   - **Top n %**

     This option allows you to specify the top members that together make up the specified percentage of the total value of all members. **N** in the drop-down menus is the variable that represents the percentage.
   - **Bottom n %**

This option allows you to specify the bottom members that together make up the specified percentage of the total value of all members. **N** in the drop-down menus is the variable that represents the percentage.

- **Top n Value**

  This option allows you to specify the top members that together make up at least the specified value. **N** in the drop-down menus is the variable that represents the value.

- **Bottom n Value**

  This option allows you to specify the bottom members that together make up at least the specified value. **N** in the drop-down menus is the variable that represents the value.

Specifying the range of values for selecting members

The Range section on the Sort & Select dialog box allows you to specify the range of values for the members to be selected.

Procedure

1. Click the **Sort Select** button on the toolbar.

   The **Sort & Select** dialog box displays.
2. Enable the **Range** option and specify the range using the **from** and **to** fields.

Example sorting and selecting

The purpose of this example is to explain how you can use sorting and selecting. The following screen capturer defines the starting situation in a view.

Sales Plan Measures : **Quantity**	Versions : **Budget Version 1**
Channels : **ALL CHANNELS**	Products : **Packs**

	Q1
GO Americas	143.487,00
GO Asia Pacific	103.275,00
GO Central Europe	89.891,00
GO Northern Europe	59.754,00
GO Southern Europe	16.772,00

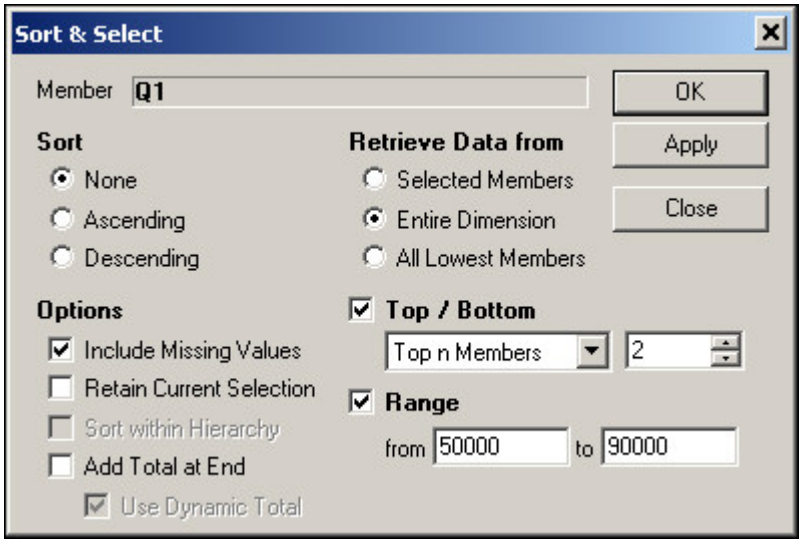
In this example we want to include the top two regions for the product packs in the first quarter from the months dimension. We are interested only in those regions that sell between 50000 and 90000 dollars. In addition we would like to show missing values.

Procedure

1. Click the **Sort Select** button on the toolbar.

   The **Sort & Select** dialog box displays.
2. Specify the following in the **Sort & Select** dialog box:
   - Set the **Sort** option to **None**.
   - Set the **Options** to **Include Missing Values**.
   - Set the **Retrieve Data from** option to **Entire Dimension**.
   - Set the **Top / Bottom** option to **Top n Members**. Specify a value of 2.
   - Specify a **Range** from 50000 to 90000.

The **Sort & Select** dialog box should look like this:



3. Click **OK**.

   The selection of members in the view changes to meet the criteria that we set in the **Sort & Select** dialog box:

   - Only the top 2 members which fall in the specified range are displayed.
   - Also the member with a missing value is displayed.

	Q1
GO Accessories GmbH	
GO Central Europe	89.891,00
GO Northern Europe	59.754,00

Copying and pasting data

Data copied to the clipboard can be pasted to other applications or from one area on the table to another area. When you copy data, you can choose to include or exclude the header information.

Procedure

1. Right-click the data.
2. Select **Extras** from the shortcut menu.
   - To copy data without headers, select **Copy to Clipboard**.
   - To copy data and include headers, select **Copy with Headers**.

   The result changes depending on whether you are in Data Entry mode:

   - When you are not in Data Entry mode, the entire table is copied to the clipboard. For more information on Data Entry, see Chapter 4, “Data entry,” on page 69.
   - When you are in Data Entry, the selection rectangle defines which area is copied.

   Note: After copying data, you can immediately paste it to another location.

Selecting the copy and paste area

You can create the copy-paste selection in several ways.

Use one of these methods to make the copy-paste selection area:

- Use the shift key + arrow keys
- Use the mouse to highlight the area
- Hold the Shift key, and click the top left cell and then on the bottom right cell

Specifying the scaling factor for copy and paste

A scaling factor specifies how you want a value to change after a paste. For example, if the OLAP value is 678 and a scaling factor of 0.01 is applied, the displayed value is 6.78.

A scaling factor is set in the **Member Formatting** menu or in the **Options > Number** menu. For more information see "Formatting scaling factor" on page 95.

The scaling factor is applied when you copy and paste a value in **Data Entry** mode. The scaling factor is also applied if the cell in which the value gets pasted has a scaling factor format.

When copying and pasting in Microsoft Excel, the value 6.78 is pasted independently of the format used (for example Microsoft Excel 8.0 Format BIFF8, SYLK, Unicode Text). Use **Edit > Paste Special** in Microsoft Excel to display the different format contents of the clipboard.

Using drag and drop to copy and paste

The Fill Handle is a small square at the bottom of the selection rectangle. If you hover over the Fill Handle the cursor changes into a cross. When you drag across a selection using the Fill Handle, you can either copy or extend the numbers using the selection rectangle.

Procedure

1. Select a cell or range of cells.
2. Select the Fill Handle and drag the Fill Handle in one direction.

   The selection rectangle expands while you drag.

   Note: When one cell is selected, the Fill Handle can be dragged horizontally and vertically, to fill an entire selection at once. When multiple cells are selected, the Fill Handle can be dragged in only one direction.
3. Release the mouse button.

   Note:

   - If only one cell is selected, the content of that cell is copied into all the cells of the new selection rectangle.
   - If more than one cell is selected, the trend in the numbers will continue in the newly selected cells.

     For example, start with three values: 100, 110 and 120, you can select these values and use the Fill Handle to drag the selection rectangle so it includes all months.

     When the Fill Handle is released, the newly selected area is filled with values that follow the same trend as the initial values. The values selected now run from 100 to 170. The numbers increase by 10.

- If more values are selected and the Fill Handle is dragged while pressing Shift, the old selection of values is repeated.

  For example, if three cells with values 100, 110 and 120 were selected, then the new selection is 100, 110, 120, 100, 110, 120, and so on.

Transfer data from a view to a Microsoft Excel spreadsheet

You can transfer data from a view to a Microsoft Excel spreadsheet.

You can do this in two ways:

- By exporting to a spreadsheet.
- By copying and pasting to a spreadsheet.

Microsoft Excel data is stored in *Binary Interchange File Format* (BIFF8), also known as *Microsoft Excel 8.0 Format*. A table in a view is copied in this Microsoft Excel 8.0 format. This means that the formatting of cells, members, and styles is applied when pasting a table from a view in Microsoft Excel.

Please note the following when copying a table from a view to an Microsoft Excel spreadsheet:

- Spacing used in member formatting or in the **Automatic Group Spacing** option on the **Headers** tab of the options dialog box is not applied when pasting in the Microsoft Excel 8.0 format.
- Microsoft Excel has 32 colors. When colors used in the formatted view are not supported in Microsoft Excel, these colors will be approximated from the Microsoft Excel color palette when pasting in the Microsoft Excel 8.0 format.
- 3D Borders or 3D lines used in member or style formatting in a view are represented as thin lines when pasting in the Microsoft Excel 8.0 format.
- Icons used in a view are not supported in the Microsoft Excel 8.0 format.
- A drill through pane in a view is not supported in the Microsoft Excel 8.0 format. However, a drill through pane can be copied and pasted separately.
- The default border styles **none** and **dashed** in a view are displayed as default Microsoft Excel borders.
- Members formatted with border style **none** are displayed with default Microsoft Excel borders.
- Members formatted with the border style **dashed** are displayed with dashed borders when pasting in the Microsoft Excel 8.0 format.
- An Microsoft Excel Workbook sheet contains a maximum of 256 columns and 65536 rows.
- When a scaling factor is used in a view, the scaled values are applied when pasting in the Microsoft Excel 8.0 format.
- Changed column width or row height in a view is not supported in the Microsoft Excel 8.0 format.

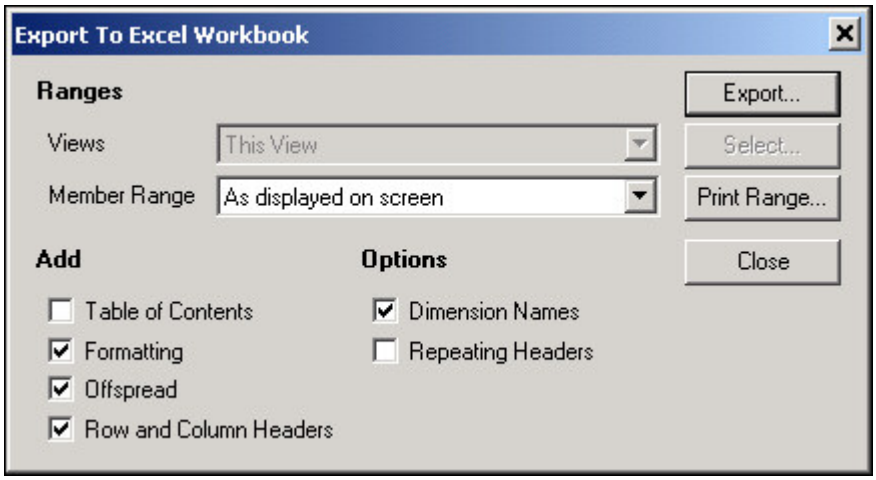
Exporting a view to a Microsoft Excel workbook

You can export a view to a Microsoft Excel workbook.

Procedure

1. Right-click in a table and click **Extra** > **Export to Microsoft Excel Workbook**

   The **Export to Microsoft Excel Workbook** dialog box opens.



2. Set the options you prefer.

   For an explanation of all the options you can set, see "Options for exporting to a Microsoft Excel workbook."

3. Click **Export**.

   By default, the Microsoft Excel spreadsheet is saved in the **My Documents** folder. The name of the Microsoft Excel Workbook is the same as the name of the view.

Options for exporting to a Microsoft Excel workbook

In the Export to Microsoft Excel Workbook dialog box you can set options.

Option	Purpose
Views	The **Views** menu allows you to export: **This View** **Some Views** If you select this option, the **Select Views to Print** is displayed. Select the views you want to export and click **OK**. **All Views**
Member Range	The **Member Range** menu allows you to export the views: **As displayed on screen** **According to Print Range** Set the print range by clicking **Print Range**. **Note:** : For an explanation about **Print Range**, see "Printing the same view for multiple members" on page 66. When you have made a DynaSelect and you choose to print **According to Print Range**, the DynaSelect will apply to all members you select. For more information, see "Using Print Ranges with DynaSelect" on page 68

Option	Purpose
Add	The **Add** section on the **Export to Microsoft Excel Workbook** dialog box allows you to add the following: **Table of Contents** Adds a table of contents to the spreadsheet. **Formatting** The formatting of the view is transferred to the spreadsheet. **Offspread** The selected offspread dimensions are displayed in the spreadsheet. **Row and Column Headers** Row and column headers are displayed in the spreadsheet.
Options	You can set the following options for the Microsoft Excel spreadsheet: **Dimension Names** This option allows you to show or hide the dimension names from the offspread area when exporting to a Microsoft Excel spreadsheet. **Repeating Headers** This option allows you to repeat the member names in the outer inspread dimensions. When dimensions are stacked in the inspread area, the names of the members in the outer dimensions are repeated in every row or column in the exported Excel spreadsheet.

Copying and pasting data to a spreadsheet

You can copy and paste from a view to Microsoft Excel.

Procedure

1. Right-click a table in a view.
2. Click **Extra** > **Copy to Clipboard** if you only want the data to be copied.

   If you also want the member names and the names of the set dimensions to be copied, click **Copy with Headers**.
3. In Microsoft Excel do one of the following:
   - Click **Edit** > **Paste** to paste the table in Microsoft Excel 8.0 format while retaining the formatting.
   - Click **Edit** > **Paste Special**, then select the desired format to paste the table without formatting.

   Note: When pasting in Microsoft Excel 8.0 format, only the displayed offspread dimensions are pasted. When pasting in a different format, all dimensions (visible, hidden and ignored) are pasted.

Pasting special formats in Microsoft Excel 8.0 format

You can paste the contents of the clipboard in another format.

For example, if you do not want the Express Advisor formatting to be applied, select **Edit > Paste Special** and select the **SYLK** format. Note that when pasting in Microsoft Excel 8.0 format, only the displayed Offspread dimensions are pasted. When pasting in a different format, all dimensions (visible, hidden and ignored) are pasted.

Calculations

The calculator enables you to create calculations.

The basic functions include multiplication (*), division (/), addition (+) and subtraction (-).

You can create the following calculations:

- General
- Mathematical
- Statistical

General functions

This section describes the general functions available in the calculator.

General functions can be either static or dynamic. For more information see "Creating dynamic functions" on page 50.

Function	Explanation
Variance	This function calculates the difference between members: (A - B) This function verifies whether an expense tag was added. In that case, A and B are switched.
Variance %	This function calculates the difference between members in percentages: ((A - B) / B) * 100 This function verifies if an expense tag was added. If this is the case, the formula is ((B - A) / abs (B)) * 100
Growth	This function calculates the difference between members: (A - B) This function verifies whether an expense tag was added. In that case, A and B are switched.

Function	Explanation
Growth %	This function calculates the difference between members in percentages: ((A - B) / abs (B)) * 100 This function does not verify if an expense tag was added.
Ratio	This function divides members: A / B
Round	Rounds the value of a specified member, which is not the same as changing the number of decimal places. When changing the amount of decimals, only the display code changes. Using the **Round** function, the new value is used. In this example, the value is rounded to 1 decimal place. It is allowed to use a negative number of decimals.
Count	This function counts the number of members entered in the function: Count (10, 20, 30) = 3 Missing values are not counted.
Distinct Count	This function counts the number of distinct values in the function; Count (10, 20, 20) = 2
Percentage of Total (see note below)	This function calculates the percentage by which the selected members contribute to the selected Dimension.
Rank (see Note below)	This function assigns an order within a specified member.
Rank % (see note below)	This function assigns an order from 1-100% within a specified member. The rank is expressed as a percentage of the highest rank.
Cumulative (see note below)	This function counts the cumulative values of a specified member.
Cumulative % (see note below)	This function counts the cumulative values of a specified member, expressed as a percentage of the final total.
Dynamic Total	This function counts the total number of members. If the selection changes, the dynamic total will change as well.
Dynamic Count	This function counts dynamically the number of members entered in the function: Count (10, 20, 30) = 3
Dynamic Distinct Count	This function counts dynamically the number of distinct values in the function: Count (10, 20, 20) = 2

Function	Explanation
Note: The results of the general functions **Percentage of Total**, **Rank**, **Rank %**, **Cumulative** and **Cumulative %** are derived from values of the Members on the opposite axis.	

Statistical functions

This section describes the statistical functions available in the calculator. Statistical functions can be either static or dynamic.

For more information see "Creating dynamic functions" on page 50.

Note: Statistical functions are based on a population and not on a probability distribution.

Function	Explanation
Average	This function calculates the average value of the specified members.
Median	This function calculates the median of the specified members.
Mode	This function calculates the mode of the specified members.
Min	This function returns the smallest value in a specified range.
Max	This function returns the largest value in a specified range.
Standard Deviation	This function calculates the standard deviation of the specified members.
Statistical Variance	This function calculates the statistical variance of the specified members.
Statistical Z	This function calculates the statistical Z of the specified member.
Dynamic Average	This function calculates the dynamic average value of specified members.
Dynamic Median	This function calculates the dynamic median value of the specified members.
Dynamic Mode	This function calculates the dynamic mode of the specified members.
Dynamic Min	This function dynamically returns the smallest value in a specified range.
Dynamic Max	This function dynamically returns the largest value in a specified range.

Mathematical functions

This section describes the mathematical functions available in the calculator.

Function	Explanation
Abs	This function makes a value of a specified member absolute. This means that negative becomes positive.

Function	Explanation
Power	This function calculates the result of a specified member raised to a power.
Square Root	This function returns the square root value of a specified member.
Root	This function returns the entered root value of a specified member.
Log	This function determines the logarithm of a specified member.

Adding calculations

You can use the calculator in a view to create calculations that return values that are not strictly defined by your cube and dimension structures.

For example, if a dimension includes the members *Q1* and *Q2*, you can create a calculation that sums the values of these members to return a value for *1st Half Year*.

Calculations that you create can be used like any other member. They can be formatted, moved, used in other calculations, or used in the offspread.

Calculations do not have levels.

Procedure

1. Click the **Calculator** button on the toolbar, or right-click a table and choose **Calculator**.
2. To enter a member name in the calculator, click the member in the data window.
3. To enter a mathematical operator in the calculator, click the corresponding operator button.
4. To enter a number, click the appropriate number button.
5. To enter a function, click **f(x)**, and then click the desired function in the drop-down menu.
6. After entering the entire calculation, click = to save the calculation and calculate the value.

Example: creating a calculation for the 1st Half Year

To illustrate a simple calculation, consider a dimension with the members Q1 and Q2. The following steps allow you to create a calculation for 1st Half Year, the sum of these members.

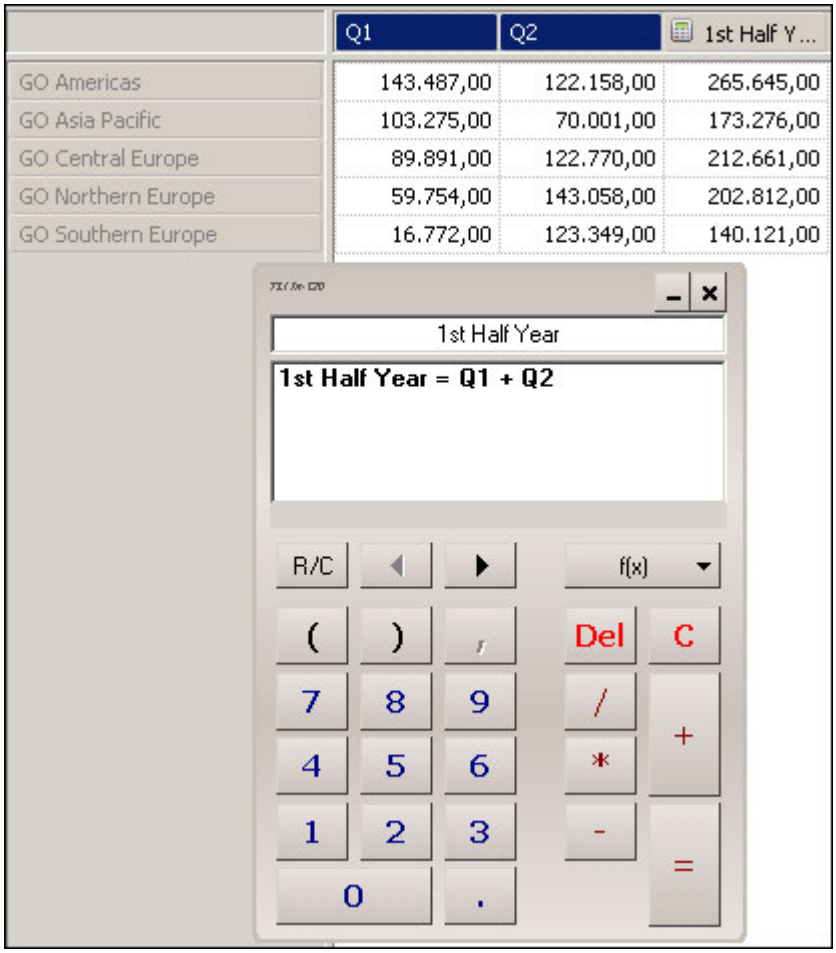
Procedure

1. Click the **Calculator** button on the toolbar.
2. Click in the equation box on the calculator.
3. Click member **Q1**.
4. Click the + button.

   If you do not press the + button or any other of the operator buttons between two members or values, a plus sign is added automatically.
5. Click member **Q2**.

6. Change the calculation name to **1st Half Year** in the **Name** field, located immediately above the calculation box on the calculator.
7. Click the = button to add the calculation.

   The calculation is added to your table. A new member called *1st Half Year* is added to the columns and shows the sum of *Q1* and *Q2*.



The new calculation is stored when you save the view and will be available the next time you open the view.

Calculations are added as members of a dimension, but will only appear in this view.

If you look at the dimension in the **Select Members** dialog box, all calculations will be found at the end.

All buttons respond to the same keys on your keyboard. Pressing the + key will make a plus sign appear in the calculator.

If you move your pointer over the member you can see its calculation in the tooltip.

You can also view the calculation by right-clicking the member and choosing **Member Information**.

Nesting operations

In the calculator you can use nested operations. Using brackets, you can nest operations.

Creating a calculation with nested operations

As an example, the percentage share of the combined regions northern Europe and southern Europe compared to the whole of Europe will be calculated.

For this calculation we need a formula that looks like this:

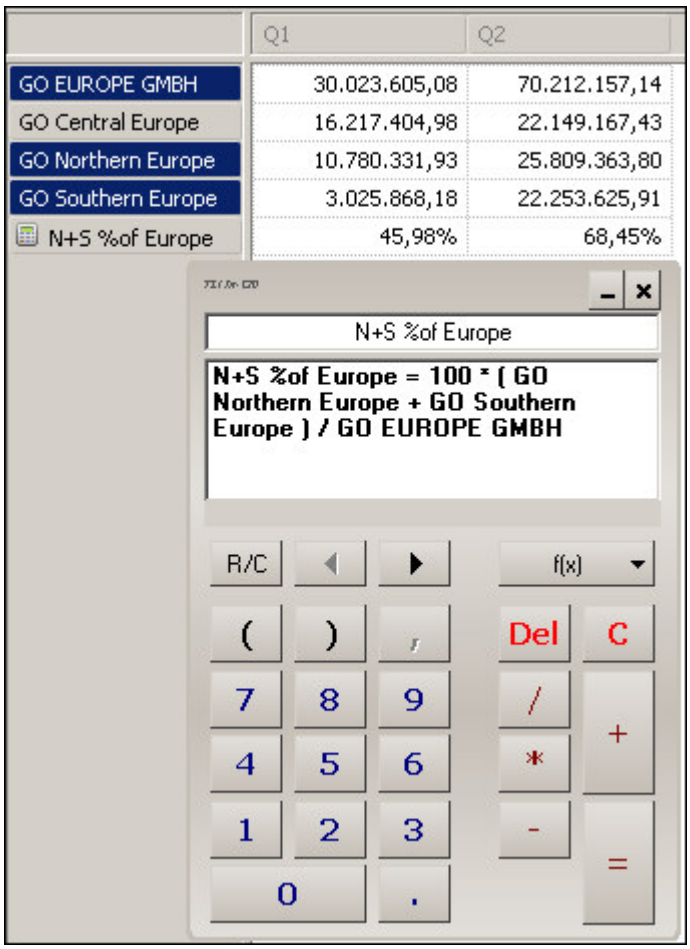
```
100 * ( Go Northern Europe + Go Southern Europe ) /
GO EUROPE GMBH
```

The function **Ratio %** is available and gives the same result, but is not used for the sake of this example. See the section "General functions" on page 44 for an explanation.

In this example, the calculated member was formatted with a '%' sign.

Procedure

1. In a view, open the calculator.
2. Click **1**, **0**, and **0** to enter 100.
3. Click *****.
4. Click **(**.
5. Click the member *Go Northern Europe*.
6. Click **+**.
7. Click the member *Go Southern Europe*.
8. Click **)**.
9. Click **/**.
10. Click the member *GO EUROPE GMBH*.
11. Change the name to *N+S % of Europe*.
12. Click **=**.
    The calculation is added.
13. Click **x**, to close the calculator.
    Your table and its calculation look like this:



Creating dynamic functions

General and statistical functions can be either static or dynamic. These calculations automatically change if the member selection changes.

The static functions do not change once a function is made.

Dynamic functions are aware of each other. If, for example, a **Dynamic Total** and a **Dynamic Max** are added, the value of the **Dynamic Total** will be ignored when calculating the **Dynamic Max**.

Be aware of the order of calculations when using dynamic functions. It may be necessary to adjust the order in which the calculations are performed. See "Managing the calculation sequence" on page 55.

When making a dynamic calculation, the inspread dimension to which the calculation should be added, has to be chosen.

Procedure

1. Open the calculator.
2. Choose a dynamic function, for example **Dynamic Total**.
3. Click =.
4. Select a dimension in the **Select Dimension** dialog box.
5. Click **OK** to confirm the chosen dimension.

Combining dynamic functions

With the dynamic functions, many combinations can be made.

In this section, you see an example of this. A customized **Dynamic Rank** is created using the functions **Dynamic Min**, **Dynamic Max** and **Rank**.

The market for which the Sales values are most unequally spread, will give 'Rank 1' as a result. The market for which the Sales values are most equally spread, will give the highest rank as result.

For this example we assume you have a view open that shows the children of Europe vertically and the Net Sales Revenue of three months horizontally.

	Apr	May	Jun
GO Central Europe	5.928.388,80	4.272.592,19	7.849.304,05
GO Northern Europe	7.486.610,56	3.603.687,87	10.018.627,85
GO Southern Europe	9.198.721,25	3.872.813,43	5.173.502,89

Procedure

1. Open the calculator.
2. Click **f(x)**.
3. Choose **Dynamic Max** and subtract **Dynamic Min**.
   The calculation is added, showing the difference between the maximum and the minimum value.

	Apr	May	Jun
GO Central Europe	5.928.388,80	4.272.592,19	7.849.304,05
GO Northern Europe	7.486.610,56	3.603.687,87	10.018.627,85
GO Southern Europe	9.198.721,25	3.872.813,43	5.173.502,89
Difference	3.270.332,45	668.904,32	4.845.124,96

4. In the calculator, click **f(x)**.
5. Choose **Rank** and select the calculation **Difference**.
6. Rename this calculation to **Dynamic Counted Rank**.
   The Rank is added to the member selection.

	Apr	May	Jun
GO Central Europe	5.928.388,80	4.272.592,19	7.849.304,05
GO Northern Europe	7.486.610,56	3.603.687,87	10.018.627,85
GO Southern Europe	9.198.721,25	3.872.813,43	5.173.502,89
Difference	3.270.332,45	668.904,32	4.845.124,96
Dynamic Counted Rank	2,00	3,00	1,00

When selecting other members, these calculations will change accordingly.

It is possible to make this dynamic rank in one calculation. The formula looks like:

`Rank (Dynamic Max-Dynamic Min)`

Dynamic calculations can be moved to the offspread. The calculation will remember the selected inspread members.

Using relative and absolute members in functions

The calculator can also work with relative members as opposed to absolute members. This means the calculator will include members based on their position in the rows or columns and not by name.

Before clicking on a member to insert it into the calculation, first switch on the **R/C** button in the calculator. This will enable the row/column mode. Members are inserted relatively until the **R/C** button is clicked again and the row/column mode is turned off.

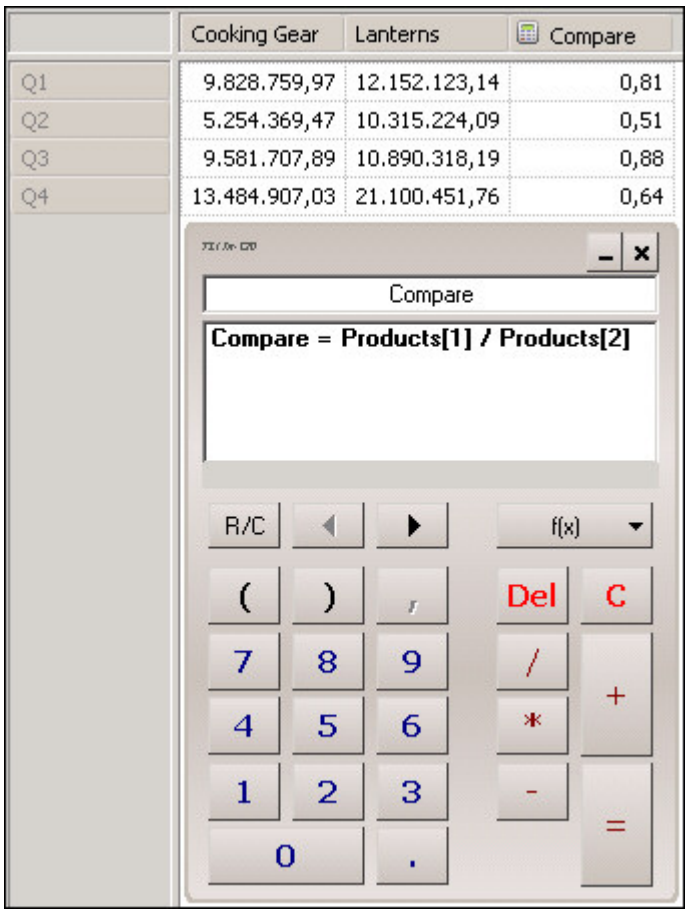
In the next example, a ratio between two products is made. The two products to be compared are the first two products in the columns. In this example **Cooking Gear** and **Lanterns**.

Procedure

1. In the calculator, click **R/C**.
2. Click the column **Cooking Gear**.
3. Click **/**.
4. Click the column **Lanterns**.
5. Change the name to **Compare**.
6. To add the calculation, click **=**.

   The added calculation looks like this:

   Products[1] / Products[2]



Results

The Calculation shows relative members, based on position.

When changing the products in the columns to **Packs** and **Sleeping Bags**, the calculation will automatically show the comparison between **Packs** and **Sleeping Bags**.

The selected members change and the calculation automatically shows new results.

The calculation itself does not have to be changed. The view will automatically adapt the calculation to this new selection and display the correct results.

Note:

- **R/C** calculations are able to deal with positions beyond the number of selected members. The positions beyond the number of selected members for that dimension will be taken as missing values.
- If you have created an invalid calculation because the calculation includes itself, the calculation displays **#error**.
- **R/C** calculations can be moved to the offspread. The calculation will remember the selected inspread members.

Creating cross-dimensional calculations

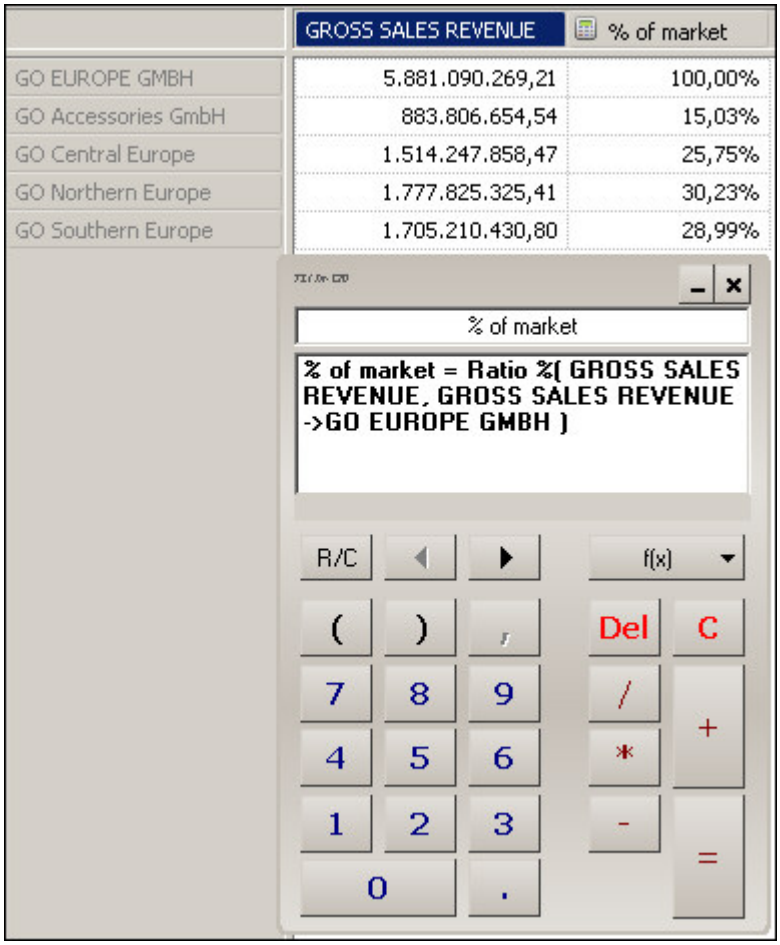
Calculations can also use member combinations rather than single members. This allows cross-dimensional calculations to be made.

An example of such a calculation is a percentage of total market calculation. Here you need to divide a certain member by a member for Market.

Procedure

1. In the calculator, click **f(x)**.
2. Select the **Ratio** % function.
3. Click the member **GROSS SALES REVENUE**.
4. Click the member **GROSS SALES REVENUE** again.
5. Click the member **GO EUROPE GMBH**.
6. Change the name to **% of market**.
7. Click **=**.

   The calculation should look like this:



Results

The result will be a column (or row) with the percentages compared to the total market.

Following the steps above, you can see that if you click a member and immediately after, you click a member of another dimension, you can start specifying a combination.

All members of that combination are shown with an arrow (->) in between.

Alternatively you can click a cell in the table. The calculator will then insert all members in the table that make up the combination of this cell.

Managing the calculation sequence

When multiple calculations have been added to a view, the order in which those calculations are performed may become important. It is possible that a result of a calculation influences another calculation.

Procedure

1. Right-click in a view and select **Calculations**.

   The **Calculated Members** dialog box appears.

   By default the calculation order is set to the order in which the calculations are added.
2. To change the order, select a calculation and press the up or down arrow buttons  .
3. Click **Close**.

Viewing calculations

You can view calculations in several ways.

The following ways are available:

- By moving over a calculated member.
- By right-clicking on a calculated member and selecting **Member Information**.

  The **Formula** field displays the calculation.
- If the member is not displayed on the screen or if you want an overview of all calculations, use the **Calculated Members** dialog box.

  Right-click in a view and select **Calculations**.

  The **Calculated Members** dialog box appears.

  Select the calculation you want to view and select **Member Info**.

  The **Formula** field displays the calculation.

Procedure

Move the mouse cursor over a calculated member.
The tooltip displays the calculation.

Editing calculations that are visible

After creating a calculation you can edit it. To change a calculation you will need to open it in the calculator. This section explains editing a calculation of a calculated member that is displayed on screen.

Procedure

1. Right-click the calculated member for which you want to change the calculation.
2. Choose **Calculator**.

   The calculation will now appear in the calculator and can be changed.
3. When you are ready with your changes to the calculation you can:
   - Activate the changes by clicking the **=** button.
   - Clear the calculation by clicking the **C** button.

- Close the calculator by clicking the **X** button.

Note: You can also change the calculations using your keyboard. All buttons of the calculator will respond to the corresponding keys on your keyboard, including the Backspace key.

Editing calculations that are not visible

After creating a calculation you can edit it. To change a calculation you need to open it in the calculator. This section explains editing a calculation of a calculated member that is not displayed on screen. A calculated member can be not visible because it is not selected in the view.

Procedure

1. Right-click the view and choose **Calculations**.

   The **Calculated Members** dialog box opens.
2. Select the calculated member for which you want to change the calculation and click **Open**.

   The calculation will now appear in the calculator and can be changed.
3. When you are ready with your changes to the calculation you can:
   - Activate the changes by clicking the **=** button.
   - Clear the calculation by clicking the **C** button.
   - Close the calculator by clicking the **X** button.

   Note: You can also change the calculations using your keyboard. All buttons of the calculator will respond to the corresponding keys on your keyboard, including the Backspace key.

Using multiple arguments in the Rank function

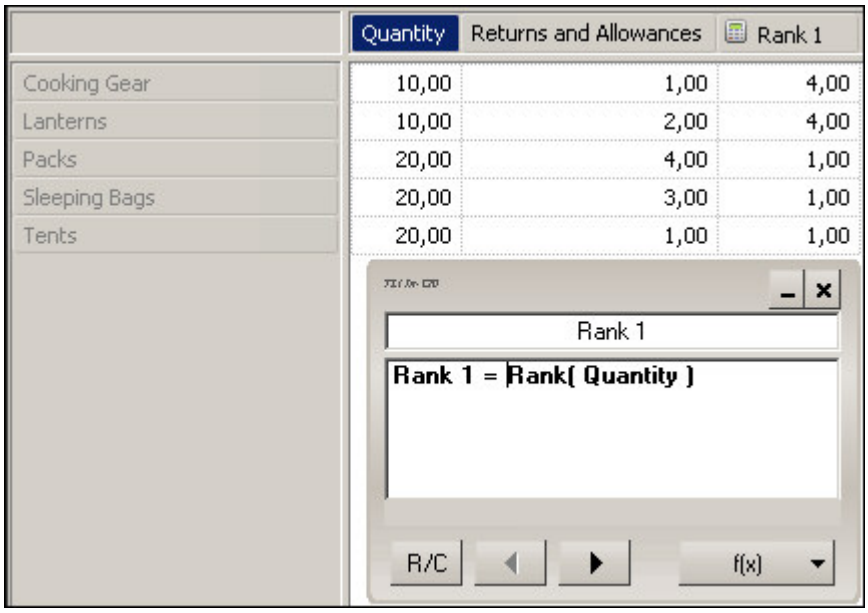
The Rank function in the calculator allows you to assign an order within a specified member.

It is possible to use multiple arguments in the **Rank** function. This allows you to rank multiple members at once, in the order that they are specified.

Example: one argument in the Rank calculation

This example shows how to use one argument in the Rank calculation.

The screenshot shows one ranked member **Quantity**.



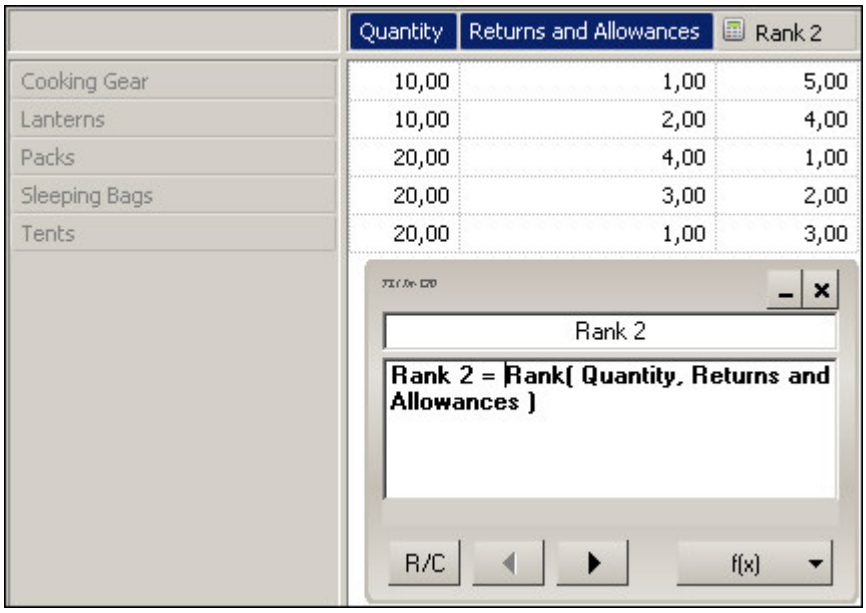
Rank 1 is calculated from the cell values of member **Quantity** and the shown camping gear. Because the value 20 appears three times, rank **1** is applied three times.

The value **10** appears two times and is therefore applied two times starting at rank **4**.

Example: multiple arguments in the Rank calculation

This example shows how to use two arguments in the Rank calculation.

The screenshot shows the situation where two members are ranked: **Quantity** and **Return and Allowances**.



The values of the calculation **Rank 2** are determined by the following:

1. First the cell values of member **Quantity** are ranked.

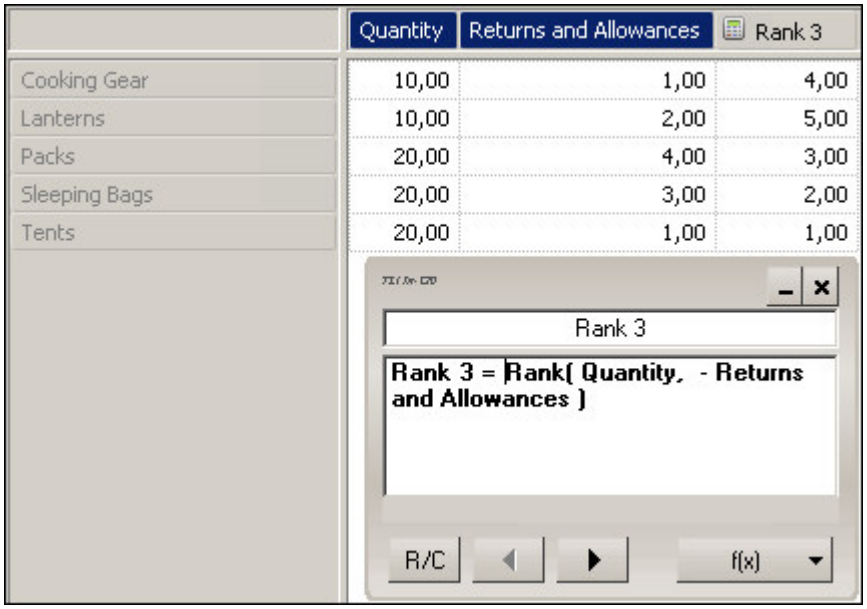
2. For the values of member **Quantity** that are equal for the shown camping goods, a second order that uses the member **Return and Allowances** is made.

Although the value 10 appears twice for the member **Quantity** and the shown camping goods, these values 10 rank differently. This is because the ranking of the member **Return and Allowances** influences the ranking of the values of the member **Quantity**. This is similar for the value 20.

Example: multiple arguments in the Rank calculation with changed sign

This example shows how to use multiple arguments in the Rank calculation.

The screenshot show the situation when two members are ranked: **Quantity** and **Return and Allowances**.



The values of the member **Return and Allowances** and the shown camping gear, have changed their signs from positive to negative. The reason for this could be that you want the best selling camping gear with the lowest number of returns to appear high in the ranking.

Deleting calculations that are visible

You can delete calculations that are visible in a view.

Procedure

1. Right-click the calculated member and choose **Delete**.
2. You will be asked to confirm the deletion of this member.

   The calculation will be removed from the selection and also deleted from the dimension. It will no longer be available.

   If the calculation is used in other calculations, these will be removed as well. The confirmation will give a list of all those automatically deleted and dependent calculations.

Deleting calculations that are not visible

You can delete calculations that are not visible in a view. A calculated member can be invisible because it is not selected in the view.

Procedure

1. Right-click the view and choose **Calculations**.

   The **Calculated Members** dialog box opens.
2. Select the calculated member you want to delete and click **Delete**.
3. You will be asked to confirm the deletion of this member.

   The calculation will be removed from the selection and also deleted from the dimension. It will no longer be available.

   If the calculation is used in other calculations, these will be removed as well. The confirmation will give a list of all those automatically deleted and dependent calculations.

Printing Views

There are many options for printing your views. In addition to the typical print options you can preview the printing job, work with headers and footers, and define page breaks and a variety of other options.

You can set many print options directly from the **Print** dialog box.

You can also specify many aspects of printing using the **Print** tab on the **Options** menu. You can get to the **Print** tab by using the **Options** button on the **Print** dialog box or using the **Options** icon on the toolbar.

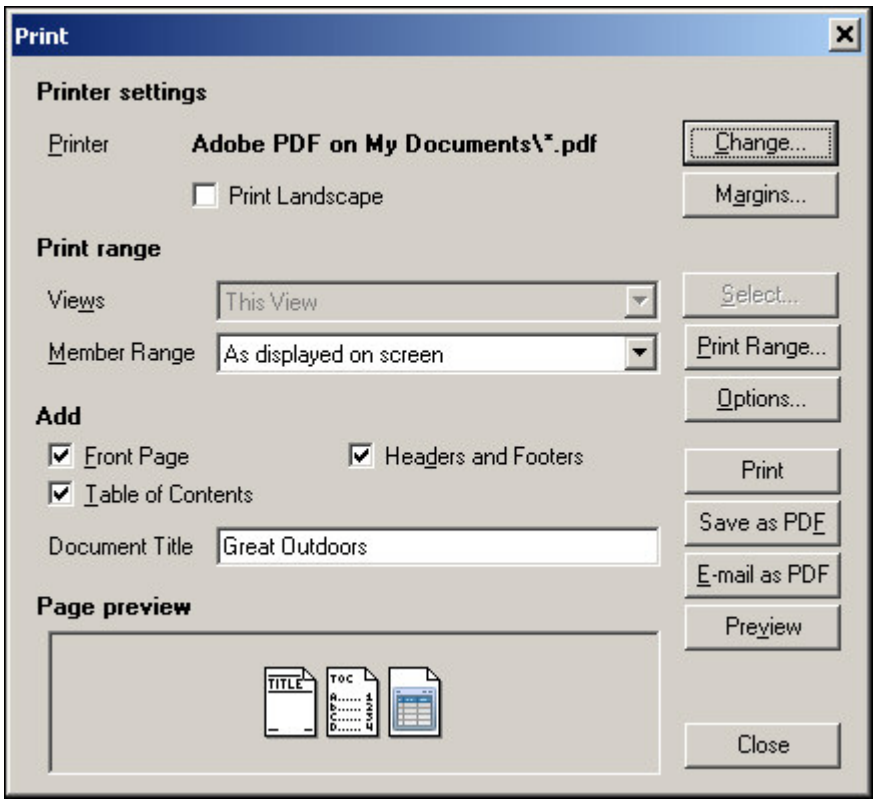
Using the Print dialog box

This section explains how to print a view.

Procedure

1. Open the view.
2. From the toolbar, click the print icon  .

   The **Print** dialog box displays:



On the **Print** dialog box you can set the following details about your print job:

- **Printer Settings**

  To change the default printer setting for the selected printer, click **Change**.

  The standard print setup menu displays where you can set any of the usual printer options such as paper size, paper source, and other properties of the selected printer.

- **Margins**

  To change the margins for the print job, click **Margins**.

  The **Paper Margins** dialog box displays where you can set the margins or click **Default** to return to the default margins of .05 inches.

- **Orientation**

  The default orientation is portrait. To change the orientation for all views to landscape, select **Print Landscape**.

  To define a specific orientation for specific views, see "Printing the same view for multiple members" on page 66.

- **Print range**

  To specify the amount of material to print, use the **Print Range** options on the Print menu. You can specify the material to print based on the views or using the members:

  – **Views**

    To print the current view, select **This View**.

    When **This View** is selected, the **Options** button becomes available so you can set specific print options for this view that are distinct from the rest of the table views.

    To specify more than one view, select **Some Views**.

    To print all views, select **All Views**.

– **Member Range**

By default, the members included in the print job are those defined by the Print Range views. When **According to the Print Range** is selected, click **Print Range** to specify the members to use for the print job. See "Printing the same view for multiple members" on page 66 for more information.

To override the **According to the Print Range** and use the members defined by the preview, select **As displayed on the screen** and click **Preview**. See "Using the Print Preview" for more information.

- **Add**

  The **Add** options specify when a **Front Page**, **Table of Contents**, **Headers and Footers**, or a **Document Title** are added to the print job. When these options are selected, they are generated at print time. To define their content, see "Using the Print Preview." To suppress these additional pages, clear these boxes.

- **Print**

  When the print options are complete, select **Print** to initiate the printing.

- **Save as PDF**

  To save the print job as a PDF file, indicate the members, print range, and any additional settings such as Table of Contents and Document Title to be included, and click **Save As PDF**.

- **Email as PDF**

  To e-mail PDF files click the **Email as PDF** button on the print menu.

- **Page Preview**

  The Page Preview area on the Print menu shows a visual representation of the available views.

- **Preview**

  Click the **Preview** button on the Print menu to see a sample of how your print job will look. See "Using the Print Preview" for more information.

Using the Print Preview

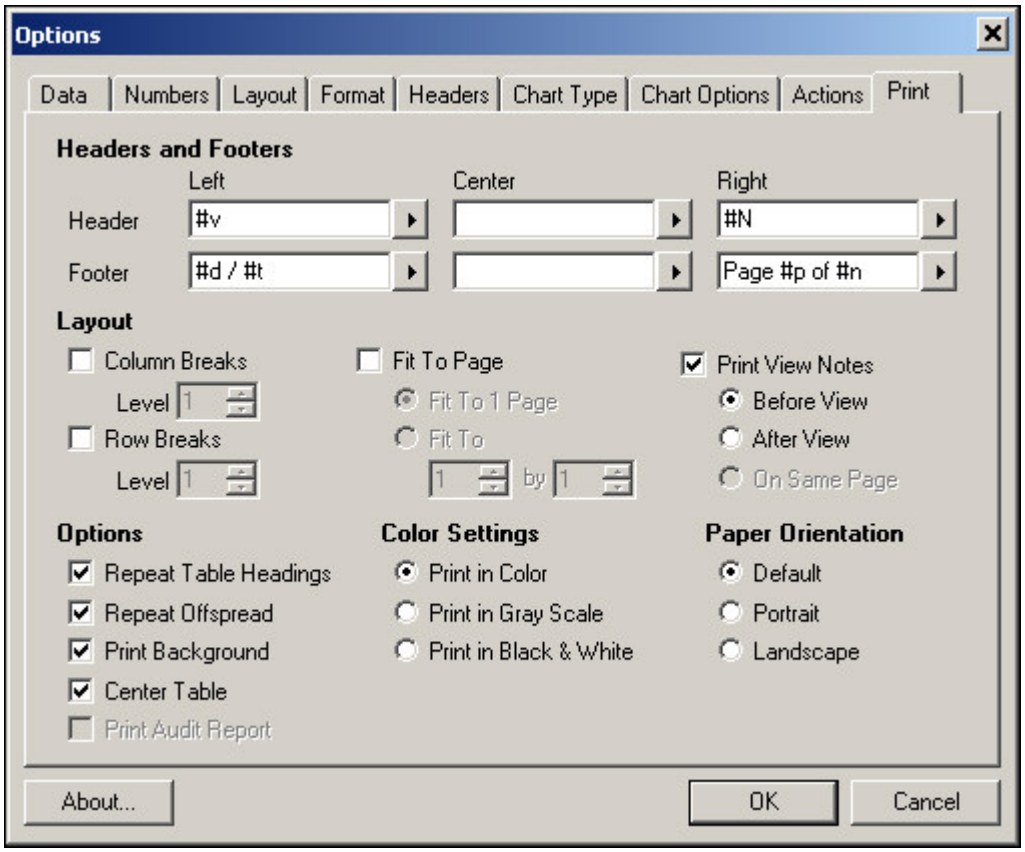
The print preview toolbar has buttons.

Button	Purpose
	Click the **Print** button to specify the number of pages to print, the number of copies to print, and to initiate printing.
	Click the **PDF** button to save a view as a PDF or send the PDF as an e-mail.
	To send the print preview to the clipboard in EMF format, click the **Copy** button.
	To return to the **Print** dialog box, click the **Setup** button.
	Click the **Full page** to display the entire page.

Button	Purpose
	In print preview, click the magnifying glass to continually zoom in. Right-click the magnifying glass anywhere to zoom out. Use the drop down menu to select a set zoom percentage.
	Go to the **First Page** in the print preview.
	Go to the **Previous Page** in the print preview.
	Go to the **Next Page** in the print preview.
	Go to the **Last Page** in the print preview.
	**Close** the print preview.

Using the Print tab on the options dialog box

The Options menu contains many tabs for different parts of IBM Cognos Express Advisor. The Print tab provides options for defining how to print a View.



Defining Headers and Footers

This section explains how to define headers and footers.

You can insert codes that generate variable data, for example Document Name and Page Number.

Code	Meaning
#N	Document Name
#v	View Name
#S	Server Name
#B	Database Name
#u	User Name
#o	Offspread
#f	Scaling Factor Value
#p	Page Number
#n	Number of Pages
#d	Short Date
#D	Long Date
#t	Short Time
#T	Long Time
#l	New Line

For example: Company #l Demo Database will be printed as:

Company

Demo Database

When using the code #o, the following additional codes can be printed:

- #o(n) = only the offspread member of the n-th offspread dimension is printed, where n is a number.
- #o(name) = only the offspread member of dimension **name** is printed, where **name** is the name of the dimension.

Procedure

1. Click **Print** > **Options** > **Print**.

2. For each section of the Header and Footer, enter the text you want to include. Use the pull-down menu to insert codes that generate variable data, for example Document Name and Page Number.

Breaking Pages Based on Rows and Columns

When you have stacked dimensions in the rows or in the columns, you can print the table per group.

Procedure

1. To specify the level at which column breaks occur in the print job, enter the level to use at the **Print** > **Options** > **Print** tab > **Column Breaks Level** option.

   The pull-down menu lists the available levels.
2. Select Level 1 to use the first dimension, Level 2 for the second, and so on.

   For example, if **Product** is your first dimension and you select **Column Breaks Level 1**, the pages will be divided in a page per group based on the most outer dimension, that is, each product has its own page.

   Follow the same procedure to set the Row breaks for printing using the Row Breaks option on the **Options** > **Print** tab.

   Note: When the groups are larger than one page, use the **Fit to Page** option to make each group have its own page.

Fitting a print job to one page

You can force your print job to fit onto a single page.

When you have a table and a chart on screen, the **Fit To 1 Page** option puts the table and the chart on one page.

Procedure

1. Select the **Print** > **Options** > **Print** tab **Fit To Page** option.

   When this option is not selected the view uses the number of pages it needs.
2. This option must be set for each view.

   By default, when a table and chart display on a screen, the printed version puts the table and chart on separate pages. To force the table and screen onto the same page, select **Fit To Page**.

Fitting to X by Y pages

You can specify the total number of pages to use.

You do this with the **Fit to X by Y** option. The first value entered is the width in number of pages to use. The second value is the length in number of pages.

Procedure

1. When both the **Fit X by Y** option is selected and **Row** or **Column** Breaks are specified, the **Row** and **Column** breaks are applied first. Then the **Fit to X by Y** number of pages is used.
2. When printing a view as few pages as possible are printed. This means when entering a value of, for example, 3 by 2, and the table fits on one page, the print will consist of only one page. Apart from the table, the print will in this case consist of a maximum of three pages wide and two pages long.

   Note:

- It is not necessary to enter a number in both fields. When entering, for example, only 3 in the first field, the report will have a maximum width of three pages. The length is automatically calculated by the number of pages needed.
- The **Fit To X by Y** option does not work for charts.

Printing the notes of a view

If the view you are printing has notes, then you can print the notes.

For more information, see "Adding notes to a view" on page 15.

When view notes are printed on the same page, the formatting is also printed (background and font formatting).

When view notes are printed before or after a page, only the font type, size, and styles are printed.

Procedure

1. Click **Print** > **Options** > **Print** tab > **Print View Notes**.
2. Specify the position where you want the note to print:
   - **Before View**
   - **After View**
   - **On Same Page**

     The option **On Same Page** is available only when **Fit To Page** is also selected, or when the **Fit to** option is set to **1** by **1**.

Specifying Table Headings, Offspread, Backgrounds, and Alignment in print jobs

You can specify the way table and offspread headings display in your print job.

Procedure

1. Click **Print** > **Options** > **Print** tab > **Options**.
2. You can select the following options:
   - **Repeat Table Headings**

     By default the row and column headers repeat on all pages of a printed view. To prevent the rows from repeating and having only the first page display column and row headers, clear the **Repeat Table Heading** option.
   - **Repeat Offspread**

     By default, offspread members are repeated on larger views.

     To prevent offspread members from being repeated across all pages, clear the **Repeat Offspread** option.
   - **Print Background**

     By default the background of the table is formatted and printed. To prevent the background formatting from being included when you print, clear this option.
   - **Center Table**

     By default the table is center aligned when printed. To align the table to the left instead, clear this option.

Indicating color

You can select the hue for printing jobs.

Procedure

1. Click **Print** > **Options** > **Print** tab > **Color Settings**.
2. You can select the following options:
   - **Color**
   - **Gray Scale**
   - **Black and White**

Specifying the view orientation

By default all views print in Portrait mode.

To change the default orientation for all views, select the **Print Landscape** option on the Print menu.

Procedure

1. To specify a different orientation for a specific view, open the view and set the **Print Range** > **Views** to **This View**.
2. Click the **Options** and select the orientation for this view only:
   - **Default**

     Use the setting made on the Print menu. If the Print Landscape option is selected, use Landscape for this View. If it is cleared, use Portrait.
   - **Portrait**

     Use Portrait for this view only.
   - **Landscape**

     Use Landscape for this view only.

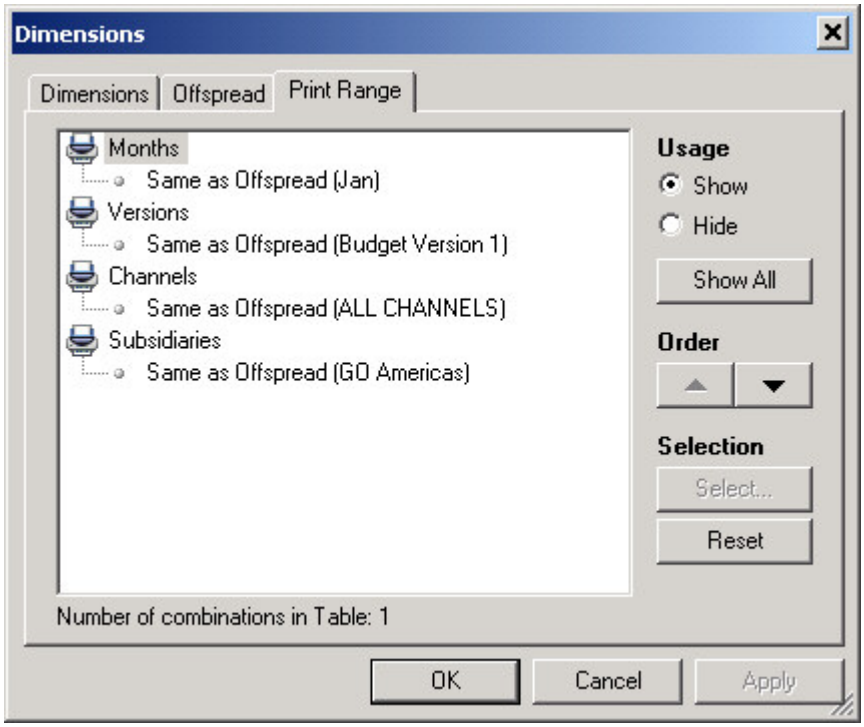
Printing the same view for multiple members

You can print the same view for more than one offspread member.

Procedure

1. Click the **Print** button.
2. At the **Member Range** option, select **According to Print Range**.

   By default the selected members are the same as the offspread selection. In this way the print range selection changes when a member in the offspread selection is changed.
3. To select the members, click **Print Range**.

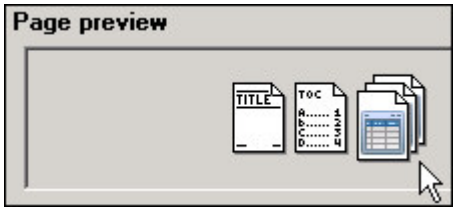


Define the dimensions to use and the way to print them using these options.

- To reveal all dimensions, click **Show All**.
- To print a dimension, select it and click **Show**.
- To prevent a dimension from printing, select it and click **Hide**.
- To specify the order for printing dimensions, use the up and down arrow buttons  to arrange dimensions from the top (prints first) to the bottom (prints last).
- To select multiple members as selected in the offspread selection, click the member and click **Select**.
- Use the **Reset** button to set the print range to the selected members in the offspread dimensions.
- To sort the members, click the **Order** tab. See "Sorting the order of members" on page 34.

The number of combinations of Print Range members displays at the bottom of the Dimensions dialog.

To print a document with multiple pages per view, use the **Print Range** > **According to Print Range** option on the individual views to set their individual print options. The Page preview shows that the view will be printed with multiple pages.



Page Numbering in Wide Views

When a view is wider than one page, the page numbering is adjusted first across then down.

If, for example, your view is six pages wide and four pages long, the numbering starts on the top left page and proceeds in a horizontal and successively in a vertical way until the last page is reached, as shown here:

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24

Printing an audit report

If an audit report is available for your view, you can print it.

See “Enabling audit reports” on page 15.

Procedure

1. Click the **Options** button on the toolbar.
2. Click the **Print** tab > **Print Audit report**.

Using Print Ranges with DynaSelect

You can use the DynaSelect automated tasks feature along with the Print options to automatically prepare views for printing.

When you use the **According to the Print Range,** print option, the DynaSelect applies to all the members you select.

Chapter 4. Data entry

Data entry gives you the ability to do data modeling and forward planning based on actual data. Data entry is subject to the security set for the database. You can enter data to the cells allowed by the OLAP server. All other cells are grayed out and cannot be edited.

Entering data

Data entry is available when the required members are selected and Data Entry mode is active.

In data entry mode the following restriction apply:

- Values are not updated directly to the OLAP database when sandboxing is enabled, the user must explicitly send the data. This is the default setting.
- **Data Entry** mode is subject to the database security.
- You cannot edit a greyed out cell. Either editing is not allowed or it is not a stored value. Only white cells can be edited.
- In **Data Entry** mode, you can still change the selections in the table and navigate through your data.

  Note: See "Spreading" for more information about entering data automatically.

To enter data directly into the server database:

Procedure

1. Open the view in table mode.
2. Right-click the table.
3. Select **Start Data Entry** from the shortcut menu.

   This action puts you in data entry mode. You can still change the selections in the table and navigate through your data.
4. Type either a new value directly in any editable cell, or press F2 or Enter to make the cursor active in a cell and type the new value.

   Note:

   - Cells that have changed values because of data entry, are indicated with a color.
5. Click **Send Data**.

Spreading

Spreading is a process that distributes entered values across a range of selected cells. This distribution occurs according to the spreading option that is set. Spreading is performed while in Data Entry mode and provides a quick and clear view of how new data affects the values in cells.

The following spreading options are available:

- **No Spreading**

Data can only be entered at the lowest level. Spreading can not be applied to the cells of a consolidated cell.

- **Equal Spread**
  - A specified input value to one consolidation cell is distributed to the leaves of the consolidation cell. The distributed values are in proportion to the initial value of the leaves.
  - A specified input value for a range of cells is distributed equally across the range.
  - A specified input value for a range of consolidation cells is distributed equally across the range. The values of the leaves of the consolidation cell are changed in proportion to their initial value.
- **Equal Leaves Spread**
  - A specified input value for one consolidation cell is distributed equally to the leaves of the consolidation cell. The distributed values are spread equally across the leaves.
  - A specified input value for a range of consolidation cells is repeated across the range. The distributed values are spread equally across the leaves for each consolidation cell.
- **Repeat**
  - A specified input value for a range of cells is copied to all cells across the range.
  - A specified input value for a range of consolidation cells is copied to all cells across the range. The values of the leaves of the consolidation cell are changed in proportion to their initial value.
- **Repeat Leaves**

  A specified input value for a consolidation cell is copied to all leaves of the consolidation cell. The specified value can be either copied to all leaves of the consolidation cell or to only those leaves that contain values by using the **All Leaves** spreading action.
- **Percentage Change**

  The initial cell value is multiplied by the specified percentage. The product of that multiplication can then replace, be added to, or be subtracted from the existing cell value.
- **Straight Line**

  A range of cells is populated by a linear interpolation between a start value and an end value. If applied to a range of consolidation cells then the interpolation happens on the consolidation cells. The leaf cells are changed in proportion to their initial value.
- **Growth Percentage**

  A range of cells is populated by a percentage change interpolation. The initial value is sequentially increased to all cells by the specified growth percentage.
- **Relative Proportional Spread**

  A specified input value for a consolidation cell is distributed across the leaves of the consolidation cell. The distributed values are in proportion to the leaves of a referenced consolidation cell.
- **Relative Growth Percentage**

  Populates the leaves of a consolidation cell from a percentage change input value for the consolidation cell. The change to the values of the leaves is in proportion to the leaves of a referenced consolidation cell.

The second part of the **Spreading Options** menu lists the **Spreading Actions** you can take when applying spreading:

- **Replace**

  The entered data replaces the existing data.
- **Add**

  The entered data is added to the existing data.
- **Subtract**

  The entered data is subtracted from the existing data.
- **All Leaves**

  Only available for **Types Equal Leaves Spread** and **Repeat Leaves**.

  The value is distributed to all leaves of the consolidation instead of only to those that contain values.

General spreading procedure

The general procedure for spreading data is the same for each spreading type.

Note: The spreading type can also be set by the database spreading shortcut codes directly into a cell. See "Data spreading codes" on page 72for more information.

Procedure

1. Open the view in table mode.
2. Enter **Data Entry** mode.
3. Select the consolidation cell or range of cells on which you want to perform the data spreading.
4. Select one option from the **Spreading type** menu and one from the **Spreading action** menu.
5. Enter the new data to be spread.
6. Exit **Data Entry** mode.

Pick lists

If you want to perform data entry with predefined values, then use pick lists. Pick lists are not available by default.

You have to set up the Xcelerator cube to support pick lists. For more information, see the IBM Cognos TM1 *Developer Guide*.

Procedure

1. Create a view and select dimensions and inspread and offspread members in such a way that you have cells in your view that support pick lists.
2. Right-click on a cell > **Data Entry**.
3. Click the pick list menu button  and select a predefined value from the list.

Spreading options

There are two methods you can use to spread data across cells and leaves:

- Type the spreading control codes (also called data spreading syntax expressions or shortcuts) directly into a cell.
- Use the **Spreading Types** and **Spreading Action** menus from the **Spreading Options** menu.

Data spreading codes

Each data spreading control code consists of the following components: a method code, a data action (optional), direction indicators, and method parameter.

The letters are abbreviations and indicate the spreading types. The signs are optional and indicate the spreading action.

Consider the following when using spreading control codes:

- If the data you entered does not start with one of the spreading control codes, the **Spreading Options** menu determines the way in which data is updated. When two numbers are needed separate the numbers using a colon (:).
- If the entered data starts with a valid spreading control code, all options set in the Spreading Options menu are overruled.

Spreading Control Code	Spreading Menu Option	Example
S+,~<n>	Equal Spread	S+100
LS+,~*<n>	Equal Leaves Spread	LS~*100
P+,~<n>	Proportional Spread	P100
R+,~<n>	Repeat	R100
LR+,~*<n>	Repeat Leaves	LR*100
P%+,~<n>	Percentage Change	P%+10
Keep <n>	Percentage of original value	keep 90
Increase, Inc <n>	Increase by n percentage change	Inc 10
Decrease, Dec <n>	Decrease by n percentage change	Dec 10
SL+,~<n1:n2>	Straight Line	SL100:200
GR+,~<n1:n2>	Growth Percentage	GR20:80
RP+,~<n>	Relative Proportional Spread	RP100
R%+,~<n>	Relative Growth Percentage	R%+5

Operands	Equivalent spreading action
None	Replaces original value with specified value
<n>k	Multiplies specified value by 1000
<n>m	Multiplies specified value by 1,000,000
Add, +<n>	Adds a specified value n to the original value
Subtract, Sub, ~<n>	Subtracts a specified value n from the original value
asterisk (*)	All Leaves. Valid only when using Equal Leaves Spread or Repeat Leaves.

Examples of data spreading

The following examples of spreading will help you formulate the appropriate spreading measures for your data.

Using No spreading

The No spreading type disables spreading. Spreading is not applied to the leaves of a consolidation cell.

Using Equal spread

The Equal Spread type distributes a specified value equally across selected cells. The values in the leaves of consolidation cells are changed in proportion to their initial value.

This example replaces the highlighted cells with a value of 1000 spread equally across the cells.

Q1	Jan	Feb	Mar
1,716,873.0000	441,851.0000	320,968.0000	954,054.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
206,746.0000	31,005.0000	42,614.0000	133,127.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

The result is as follows.

Q1	Jan	Feb	Mar
1,169,166.0000	275,516.3696	223,781.8648	669,867.7656
29,343.0000	7,648.0000	3,893.0000	17,802.0000
333.3333	49.9889	68.7059	214.6386
333.3333	108.2790		225.0543
333.3333	141.1017	73.1589	119.0727
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

Procedure

1. Enter **Data Entry** mode.
2. Select **Equal Spread** from the **Spreading type** menu.
3. Select **Replace** from the **Spreading action** menu.
4. Select the cell or range of cells to which you want to apply equal spread.
5. Type the value to spread, for example **1000**.
6. Press **Enter** or click outside the cell.

   The value 1000 is divided equally over the selected cells and the values in the leaves also change.
7. Select **Stop Data Entry Mode** to exit data entry mode.

Data spreading code:

Spreading code: S1000

Using Equal Leaves Spread

The Equal Leaves Spread option distributes a specified value equally across all leaves of a consolidation cell.

This example replaces the highlighted cells with a value of 1000 and spreads the value equally to the leaves of each cell.

Q1	Jan	Feb	Mar
1,716,873.0000	441,851.0000	320,968.0000	954,054.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
206,746.0000	31,005.0000	42,614.0000	133,127.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

The result is as follows.

Q1	Jan	Feb	Mar
1,171,166.0000	276,217.0000	224,640.0000	670,309.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
1,000.0000	333.3333	333.3333	333.3333
1,000.0000	333.3333	333.3333	333.3333
1,000.0000	333.3333	333.3333	333.3333
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

Procedure

1. Enter **Data Entry** mode.
2. Select **Equal Leaves Spread** from the **Spreading type** menu.
3. Select **Replace** from the **Spreading action** menu.
4. Select the **All Leaves** option from the **Spreading Action** menu.
5. Select the cell or range of cells to which you want to apply an equal leaves spread.
6. Enter the value to spread, for example **1000**, in the consolidation cells.
7. Press **Enter** or click outside the cell.

   The value 1000 is entered into the selected cells and divided equally to all leaves of that cell.
8. Select **Stop Data Entry Mode** to exit data entry mode.

Data spreading code:

Spreading code: LS+*1000

Using Proportional Spread

The Proportional Spread option distributes a specified value across selected cells in proportion to the original value.

This example replaces the highlighted cells with a value of 1000 spread proportionally across the cells and to the leaves of the cells.

Q1	Jan	Feb	Mar
1,716,873.0000	441,851.0000	320,968.0000	954,054.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
206,746.0000	31,005.0000	42,614.0000	133,127.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

The result is as follows.

Q1	Jan	Feb	Mar
1,169,166.0000	275,520.6848	223,817.3770	669,827.9382
29,343.0000	7,648.0000	3,893.0000	17,802.0000
376.7876	56.5056	77.6626	242.6195
168.8843	54.8599		114.0244
454.3281	192.3194	99.7144	162.2943
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

Procedure

1. Enter **Data Entry** mode.
2. Select **Proportional Spread** from the **Spreading type** menu.
3. Select **Replace** from the **Spreading action** menu.
4. Select the range of cells to which you want to apply a proportional spread.
5. Enter the value to spread, for example **1000**, in the cell.
6. Press **Enter** or click outside the cell.

   The 1000 value is spread to the selected cells in proportion to the original values.
7. Select **Stop Data Entry Mode** to exit data entry mode.

Data spreading code:

Spreading code: P1000

Using Repeat

The Repeat option copies the value you type and pastes it to all the selected cells. The values in the leaves of consolidation cells are changed in proportion to their initial value.

This example replaces the highlighted cells with a value of 1000. The value is also spread proportionally across the leaves of each cell.

Q1	Jan	Feb	Mar
1,716,873.0000	441,851.0000	320,968.0000	954,054.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
206,746.0000	31,005.0000	42,614.0000	133,127.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

The result is as follows.

Q1	Jan	Feb	Mar
1,171,166.0000	276,115.1088	224,065.5943	670,985.2969
29,343.0000	7,648.0000	3,893.0000	17,802.0000
1,000.0000	149.9666	206.1177	643.9157
1,000.0000	324.8371		675.1629
1,000.0000	423.3051	219.4767	357.2182
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

Procedure

1. Enter **Data Entry** mode.
2. Select **Repeat** from the **Spreading type** menu.
3. Select **Replace** from the **Spreading action** menu.
4. Select the cell or range of cells for which you want the same value repeated.
5. Enter the value to repeat, for example **1000**, in the cell.
6. Press **Enter** or click outside the cell.
   The 1000 value is written to all the selected cells.
7. Select **Stop Data Entry Mode** to exit data entry mode.

Data spreading code:

Spreading code: R1000

Using Repeat Leaves

The Repeat Leaves option copies a specified value to all the leaves of a consolidation cell.

If the **All Leaves** spreading type is left unchecked, **Repeat Leaves** updates only those leaves that initially contain a value. To force the values into all leaves of a consolidation regardless of their initial value, use the **All Leaves** option.

The **Repeat Leaves** option populates all leaves, including all members of the offspread.

This example enters a value to all leaves of a consolidation cell, even if the leaf is not visible.

Note: In the example the consolidation cells have 21 offspread members that do not show. The value of 1000 populates all 21 members, and therefore the value 21,000, shows in the leaves of the consolidation cell.

Q1	Jan	Feb	Mar
1,716,873.0000	441,851.0000	320,968.0000	954,054.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
206,746.0000	31,005.0000	42,614.0000	133,127.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

The result is as follows.

Q1	Jan	Feb	Mar
1,357,166.0000	338,217.0000	286,640.0000	732,309.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
63,000.0000	21,000.0000	21,000.0000	21,000.0000
63,000.0000	21,000.0000	21,000.0000	21,000.0000
63,000.0000	21,000.0000	21,000.0000	21,000.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

Procedure

1. Enter **Data Entry** mode.
2. Select **Repeat Leaves** from the **Spreading type** menu.
3. Select **Replace** from the **Spreading action** menu.
4. To enter the value to all leaves of a consolidation cell, select the **All Leaves** option from the **Spreading Action** menu.

   To enter the value to only those leaves that originally contained a value, leave **All Leaves** deselected.
5. Select the consolidation cell or range of consolidation cells to which you want to repeat the same value.
6. Enter the value to repeat, for example **1000**, in the cell.
7. Press **Enter** or click outside the cell.

   The value 1000 is written to all leaves in the offspread of the selected cells.
8. Select **Stop Data Entry Mode** to exit data entry mode.

Data spreading code:

Spreading code: LR*1000

Using Straight Line

The Straight Line option populates selected cells by linear interpolation between a start value and an end value.

This example replaces the highlighted cells with a straight line range of values.

Q1	Jan	Feb	Mar
1,716,873.0000	441,851.0000	320,968.0000	954,054.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
206,746.0000	31,005.0000	42,614.0000	133,127.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

The result is as follows.

Q1	Jan	Feb	Mar
1,511,327.0000	411,146.0000	278,754.0000	821,427.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
1,200.0000	300.0000	400.0000	500.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

Procedure

1. Enter **Data Entry** mode.
2. Select **Straight Line** from the **Spreading type** menu.
3. Select **Replace** from the **Spreading action** menu.
4. Select the range of cells to which you want the spread to apply.
5. Type the start and end values separated by a colon. For example, to enter a spread that starts at 300 and ends with 500, type **300:500**.
6. Press **Enter** or click outside the cell.

   The values from the start to the end values are spread over the leaves of the selected cells. The consolidated cell is updated.
7. Select **Stop Data Entry Mode** to exit data entry mode.

Data spreading code:

Spreading code: SL300:500

Using Percentage Change

The Percentage Change option changes the current cell values by a specified percentage. The product of that multiplication can then replace, be added to, or be subtracted from the existing cell values.

This example increases the value of the highlighted cell and all leaves of the consolidation cell by 10%.

Q1	Jan	Feb	Mar
1,716,873.0000	441,851.0000	320,968.0000	954,054.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
206,746.0000	31,005.0000	42,614.0000	133,127.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

Q1	Jan	Feb	Mar
1,888,560.3000	486,036.1000	353,064.8000	1,049,459.4000
32,277.3000	8,412.8000	4,282.3000	19,582.2000
227,420.6000	34,105.5000	46,875.4000	146,439.7000
101,934.8000	33,112.2000		68,822.6000
274,222.3000	116,079.7000	60,185.4000	97,957.2000
1,009,772.5000	248,827.7000	214,732.1000	546,212.7000
763.4000			763.4000
242,169.4000	45,498.2000	26,989.6000	169,681.6000

Procedure

1. Enter **Data Entry** mode.
2. Select **Percentage Change** from the **Spreading type** menu.
3. Select **Add** from the **Spreading action** menu.
4. Select the consolidation cell for which you want the increase to occur.
5. Type the percentage to use when spreading, for example, to increase the values by 10%, enter *10*.
6. Press **Enter** or click outside the cell.

   The value is increased by the percent value for the consolidation cell and for all leaves of the cell.
7. Select **Stop Data Entry Mode** to exit data entry mode.

Data spreading code:

Spreading code: P%+10

Using Growth Percentage

The Growth Percentage spreading type uses an initial value and a growth percentage value to sequentially increment the initial value over a range of cells.

This example adds a growth value of 10% to the initial value of 41,362 and increments this value in the highlighted cells.

Q1	Jan	Feb	Mar
1,716,873.0000	441,851.0000	320,968.0000	954,054.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
206,746.0000	31,005.0000	42,614.0000	133,127.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

The result is as follows.

Q1	Jan	Feb	Mar
1,888,560.3000	486,036.1000	353,064.8000	1,049,459.4000
32,277.3000	8,412.8000	4,282.3000	19,582.2000
227,420.6000	34,105.5000	46,875.4000	146,439.7000
101,934.8000	33,112.2000		68,822.6000
274,222.3000	116,079.7000	60,185.4000	97,957.2000
1,009,772.5000	248,827.7000	214,732.1000	546,212.7000
763.4000			763.4000
242,169.4000	41,362.0000	45,498.2000	50,048.0200

Procedure

1. Enter **Data Entry** mode.
2. Select **Growth Percentage** from the **Spreading type** menu.
3. Select **Replace** from the **Spreading action** menu.
4. Select the range of cells to which you want the spread to apply.
5. Enter the initial value and the percentage change to use when spreading, separated by a colon. For example, to start the range of values at 41,362 and to change by 10%, enter **41362:10**.
6. Press **Enter** or click outside the cell.

   The values begin at the initial value, and are changed by the percent amount and spread over the specified cells, based on the action you chose.
7. Select **Stop Data Entry Mode** to exit data entry mode.

Data spreading code:

Spreading code: GR41362:10

Using Relative Proportional

The value of a target consolidation cell together with its leaves can be changed in proportion to the values of a source consolidation cell and the leaves of that cell.

The Relative Proportional Spread type populates values into the leaves of a consolidation cell in proportion to the values of a source or reference cell.

The source cells can be in another part of the cube but must have the same consolidation of members as the target cells to which you want the new values to be populated.

This example changes the value of sales for February to 500,000, but keeps the same proportions as the January sales figures.

Q1	Jan	Feb	Mar
1,716,873.0000	441,851.0000	320,968.0000	954,054.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
206,746.0000	31,005.0000	42,614.0000	133,127.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

The result is as follows.

Q1	Jan	Feb	Mar
1,895,905.0000	441,851.0000	500,000.0000	954,054.0000
34,104.5012	7,648.0000	8,654.5012	17,802.0000
199,217.3568	31,005.0000	35,085.3568	133,127.0000
126,731.5192	30,102.0000	34,063.5192	62,566.0000
313,993.6896	105,527.0000	119,414.6896	89,052.0000
978,740.5622	226,207.0000	255,976.5622	496,557.0000
694.0000			694.0000
242,423.3710	41,362.0000	46,805.3710	154,256.0000

Procedure

1. Enter **Data Entry** mode.
2. Click the target consolidation cell to which you want the new values to be populated.
3. Select **Relative Proportional Spread** from the **Spreading type** menu.
4. Select **Replace** from the **Spreading action** menu.
5. Select **Months** from the **How to Spread** menu.

   Note: Tip: Place the cursor over the header bar of the member you want to change. The name of the member type shows.
6. Select **Displace**.

   The **Select Data Entry Displacement Member** selection box shows.
7. Select **January** from the **Select Data Entry Displacement Member** selection box to use for the initial values.
8. Press **OK** or click outside the cell.
9. Type the value 500000 in the target consolidation cell.

   The value of the target consolidation cell is updated along with the values of the leaves.
10. Select **Stop Data Entry Mode** to exit data entry mode.

Using Relative Growth Percentage

The value of a target consolidation cell and the its leaves can be changed by a percentage value in relation to the value of a source consolidation cell and the leaves of that cell.

The Relative Growth Percentage type spreads values to the leaves of a target consolidation cell by applying a percentage adjustment to the leaves of a source or reference cell.

Relative Growth Percentage increments the values in the leaves of the reference cell by a user-specified percentage. The resulting values are then spread to the leaves of the consolidation from which you initiated spreading.

This example changes the value of sales for February to that of January plus 10%. The January proportions are also kept.

Q1	Jan	Feb	Mar
1,716,873.0000	441,851.0000	320,968.0000	954,054.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
206,746.0000	31,005.0000	42,614.0000	133,127.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

The result is as follows.

Q1	Jan	Feb	Mar
1,881,941.1000	441,851.0000	486,036.1000	954,054.0000
33,862.8000	7,648.0000	8,412.8000	17,802.0000
198,237.5000	31,005.0000	34,105.5000	133,127.0000
125,780.2000	30,102.0000	33,112.2000	62,566.0000
310,658.7000	105,527.0000	116,079.7000	89,052.0000
971,591.7000	226,207.0000	248,827.7000	496,557.0000
694.0000			694.0000
241,116.2000	41,362.0000	45,498.2000	154,256.0000

Procedure

1. Enter **Data Entry** mode.
2. Click the target consolidation cell to which you want the new values to be populated.
3. Select **Relative Growth Percentage** from the **Spreading type** menu.
4. Select one option from the **Spreading action** menu: Replace, Add or Subtract.
5. Select the same member type as the target consolidation cell from the **How to Spread** menu.

   Note: Tip: Place the cursor over the header bar of the member you want to change. The name of the member type shows.

6. Select **Displace**.
   The **Select Data Entry Displacement Member** selection box shows.
7. Select the source member to use for the initial values.
8. Press **OK** or click outside the cell.
9. Type the percentage value to use for the target consolidation cell.
10. Press **Enter** or click outside the cell.
11. Select **Stop Data Entry Mode** to exit data entry mode.

Protecting cells from change

Cells can be protected from being edited when in data entry mode. The color of the cell changes to indicate a protected cell. The value of the cell does not change if it is in the selection of cells during Data Spreading.

A single cell without any leaves can be set to **Hold**, a consolidation cell can be set to **Hold Leaves**.

Note: The **Hold Leaves** option protects the leaf cells at the lowest level (leaf level cells). Only the leaf level cells change color to indicate that the values will not change during data entry. To see leaf level cells, ensure that the lowest members for all Dimensions are selected in both the offspread and inspread.

Note: A consolidation cell cannot be set with the **Hold** command. Any data change results in a data entry warning that indicates that data entry failed.

The highlighted cell has been set with the **Hold Leaves** command. A change to the value of the higher consolidation cell has no effect of the value of the held cell.

Q1	Jan	Feb	Mar
1,716,873.0000	441,851.0000	320,968.0000	954,054.0000
29,343.0000	7,648.0000	3,893.0000	17,802.0000
206,746.0000	31,005.0000	42,614.0000	133,127.0000
92,668.0000	30,102.0000		62,566.0000
249,293.0000	105,527.0000	54,714.0000	89,052.0000
917,975.0000	226,207.0000	195,211.0000	496,557.0000
694.0000			694.0000
220,154.0000	41,362.0000	24,536.0000	154,256.0000

The result is as follows.

Q1	Jan	Feb	Mar
2,000,000.0000	531,470.2421	320,968.0000	1,147,561.7579
34,504.9431	9,199.2197	3,893.0000	21,412.7234
240,036.3749	37,293.6462	42,614.0000	160,128.7287
111,463.5576	36,207.4935		75,256.0641
288,758.8437	126,930.7079	54,714.0000	107,114.1357
1,064,570.9381	272,087.8510	195,211.0000	597,272.0872
834.7618			834.7618
259,830.5808	49,751.3238	24,536.0000	185,543.2570

Releasing a hold on a cell

After protection has been placed on a cell, you can release it from protection.

Procedure

1. Right-click the cell with the hold on it.
2. Select the level of release you want to use:
   - **Release Hold** to remove the hold from the current cell only.
   - **Release Leaf Holds** to release the holds on the leaf level cells in the View.
   - **Release All Holds** to release all holds in the View regardless of their levels.

     A confirmation displays to verify that you really want to release all the holds in this view.
3. The color of the cell changes to indicate that the value in the cell may now be changed as a result of spreading.

Forcing a refresh data

To reduce network traffic and improve performance, Data Entry mode does not immediately refresh calculations when you enter new values.

When **Refresh Data in Entry Mode** is on and a value of a cell is changed, calculations that depend on this value are also updated.

You can force the calculations to update.

Procedure

1. Click the **Options** icon.
2. Click the **Data** tab.
3. Select the **Refresh Data in Entry Mode** check box.

Pasting data from the clipboard

Data that is copied to the clipboard from another application can be pasted to a view when in Data Entry mode.

You have the following possibilities:

- Data on the clipboard can come from the same application or another application.
- Clipboard data pastes starting from the data entry cursor position. If the clipboard data contains more rows or columns of data, it is pasted to the right or bottom of the cursor.
- The values on the clipboard are inserted and the selection rectangle shows the portion of the table affected.

Chapter 5. Tables

After you make the preliminary selection of members and dimensions, you can refine the data selection and formatting for the table.

Finding members within a table

A member can belong to an extensive list of members.

The **Search for** or **Compare with** features can help locate an exact member or group of members from such a list.

A member search can be used as a filter to select discrete members from a large list of members. You can search for an exact member name or part of a member name.

A member search can be made by using a comparison table. You can compare values against values that are greater or less than the search criteria.

Members can be set with either a property or an attribute as meta data. The meta data can be used to find the members.

You can conduct multiple searches simultaneously. For example you could first find all members whose alias name starts with New, and then within that group locate all members with the named set Major_Markets, by selecting one of the following buttons in the **Members** section of the **Find Members** window:

- **All**
- **Selected**
- **Last Found**

Finding members by using search

You can find members by searching.

Procedure

1. Click a member tag in the **Table View**.
2. In the **Select Members for** dialog box, click **Find**.
3. In the **Find Members** window, select **Search for** from the drop down menu.
4. Type the word or part of the word for which you want to search.
5. Select the first criteria of the search from the **Match** list:
   - **Member name**
   - **Alias name**
   - **Attributes**
   - **Levels**
   - **Subsets**
6. Select the second criteria of the search from the **How** list:
   - **Containing**
   - **Exact match**
   - **Starting with**
   - **Ending with**

7. Click **Find Next** or **Find All**.
8. Click **Keep Found** to clear any members that are not part of the search criteria.
9. Click **Select** to keep the selection.
10. Click **Close**.
11. Click **OK**.

Results

The members that meet the search criteria are shown in the table.

Finding members by using compare with

You can find members by using compare with.

Procedure

1. Click a member tag in the **Table View**.
2. In the **Select Members for** window, click **Find**.
3. In the **Find Members** window, click **Compare with**.
4. Type the word or part of the word for which you want to search.
5. Select the first criteria of the search from the **Match** list:
   - **Member name**
   - **Alias name**
   - **Attributes**
   - **Levels**
   - **Subsets**
6. Select the second criteria of the search from the **How** list:
   - < All member names less than the search criteria.
   - <= All member names less than or equal to the search criteria.
   - >= All member names greater than or equal to the search criteria.
   - > All member names greater than the search criteria.
7. Click **Find Next** or **Find All**.
8. Click **Keep Found** to clear any members that are not part of the search criteria.
9. Click **Select** to keep the selection.
10. Click **Close**.
11. Click **OK**.

Finding members by using attributes or properties

You can find members by using attributes or properties.

Procedure

1. Click **Select Members** > **Find**.
2. In the **Find Members** window, select **Search for**.

   This option is disabled if there are no properties for the dimension.
3. Select **Attributes** or **Properties**.

   The options are disabled if there are no attributes or properties for this dimension.

4. Click **Find**, **Find Next**, or **Find All.**

Finding members by using multiple search

You can find members by using multiple search.

Procedure

1. Create your first search.
2. Select the found members for which you want to search.
3. Click **Find All**.

Sorting dimensions

You can sort a dimension in ascending or descending order, while respecting the hierarchy of the dimensions.

Procedure

1. Click **Sort Select** from the toolbar.
2. Click **Sort within Hierarchy**.

   If the dimension is sorted, the children are sorted underneath their parents.
3. To sort within a hierarchy:
   - Click a member to open the **Select Members** window.
   - Select the **Order** tab and click the **Sort** button.
   - Click **Sort** and select an option.

     When sorting the members in reverse alphabetical order while respecting the hierarchy, choose **Reverse Sort within Hierarchy** from the pop-up menu.

     Note: Reverse Sort within Hierarchy does not create the exact reverse order of **Sort within Hierarchy** but sorts the members in reverse order within their parent members.

Missing data

Often data is missing from a table.

There can be various reasons for this and, depending on the reason, you can choose to either ignore the missing data or include the missing data as a zero value.

Ignoring dimensions

When ignoring a dimension, the influence of this ignored dimension depends on the type of dimension.

In the case of dimensions needed to make up the value in the table, the default member is used (for example if the Time dimension is ignored). When hiding a dimension, that dimension is not visible on screen. The member selection in the hidden dimension still makes up the values in the table together with the visible dimensions.

Procedure

1. To ignore a dimension, click the **Dimensions** button on the toolbar.
2. Click the dimension you want to ignore and click **Ignore**.

   On the **Offspread** tab, the ignored dimension is no longer listed.

3. To show or hide a dimension, select the dimension and select either **Show** or **Hide**.
4. Click **Apply**.

   Tip: The **Reset** button resets the selection for the dimensions and resets the visibility status (**Show**, **Hide**, or **Ignore**) to the status the dimensions had when the database was initially opened. The order of dimensions is not reset.

Suppressing missing rows and columns

When all values in a row or a column have the value zero, you can automatically suppress these row, and columns from your display.

Procedure

1. From the toolbar, click **Options**.
2. Click the **Data** tab.
3. Select the option **Missing** below **Suppress Rows Containing** and/or **Suppress Columns Containing**.

Removing missing values

You can choose to remove cells with missing values.

Procedure

1. To display only the members with data, right-click the table and select **Remove Missing Rows from Selection** or **Remove Missing Columns from Selection**.
2. The missing rows or columns are removed from the selection.

   When using the options **Remove Missing Rows from Selection** or **Remove Missing Columns from Selection**, the members you originally selected are changed and members with missing values are forgotten.

Suppressing no access rows and columns

When you do not have access to certain members you can automatically suppress these members from your display.

When this option is enabled, columns and/or rows with no access will always be suppressed automatically. The originally selected members are retained.

In some cases, enabling this option can decrease performance. In the case of stacked dimensions, this option can result in an asymmetric view.

Procedure

1. From the toolbar, click **Options**.
2. Click the **Data** tab.
3. Select the option **No Access** below **Suppress Rows Containing** and **Suppress Columns Containing**.

Suppressing rows and columns with zero values

When all values in a row or a column have the value zero, you can automatically suppress these rows or columns from your display.

Procedure

1. From the toolbar, click **Options**.
2. Click the **Data** tab.
3. Select the option **Zero** below **Suppress Rows Containing** and **Suppress Columns Containing**.

Including zero values

This feature is used to display a list of members that have zero values in the database. For example, it can be used in your search to include customers who did not buy products or products that did not sell in a given period.

Procedure

1. From the toolbar, click **Sort Select**.
2. Click the inspread member you want to sort.
3. Select either **Ascending** or **Descending** from the **Sort** field.
4. Select the **Include Missing Values** from the **Options** field.
5. Select the option from the **Retrieve Data From** field.
6. Click **OK**.

Table formatting

Data can be formatted and displayed in many ways.

Formatting is set in layers that are processed in a specific order from low level general format rules to high level specific rules. Every rule in a higher layer concatenates and appends with the rules in lower layers.

Formatting can be done at the following levels:

- **Themes** - lowest level

  A theme is a setting with several pre-defined colors that changes the look of the client system.
- **Backgrounds**

  Backgrounds are the colors of different areas. By default Microsoft Windows background colors are used, as set in the **Display** settings in the **Control Panel**.
- **Levels**

  Level formatting definitions are concatenated with the formatting defined in Styles.
- **Styles**

  Styles define the look of the different areas of a table or chart.
- **Member Formatting**

  Level formatting definitions are concatenated with the formatting defined in Styles.
- **Traffic Lights** - highest level

The next layer is Member formatting where you can specifically point to one or more members and change their formatting options. Multiple formats do not overwrite previous formats set in styles, and levels, but appends the format style. For example, in the styles format, an area of cell can have a negative format defined as -#s. If you format a member as a percentage with #s %, the result is -10 %.

Traffic Lights allow you to set the color of cells based on their value. For example: Negative cells can be set to red and positive cells to green. Colors defined here overwrite all the colors defined in previous layers.

Disabling format options

You can disable the formatting options.

Procedure

1. On the toolbar, click the **Options** button.
2. Click the **Format** tab.
3. Choose to enable or disable the **Cell Formatting**, **Offspread Formatting**, **Header Formatting** and **Level Formatting for Cells**.

Formatting header options

You can set several options to control the display of row headers and column headers. These options are in addition to the Styles and Member formatting options.

Procedure

1. In the **Options** window, click the **Headers** tab.
2. Set the following options.

   The options are:

   - **Member Names and Aliases in Rows**

     Displays the member name followed by its alias in the row headers.
   - **Member Names and Aliases in Columns**

     Displays the member name followed by its alias in the column headers.
   - **Indent Row Headers**

     Displays the outline structure in the row headers. By default a full stop and a space is used for this option. You can replace the defaults with a symbol of your choice.
   - **Show Icons in Headers**

     Displays the Label, Calculator, Attribute Dimensions, Dynamic Time Series, and Virtual Dimensions symbols in the headers.
   - **Indent Headers for Icons**

     Indents the headers to allow the display of icons.
   - **Auto Size Headers**

     Automatically resizes the headers to create an exact fit.

     If this option is selected, the splitter is disabled.
   - **Show Splitter**

     Displays or hides the splitter.

Formatting header width and height

You can set the header width and height to resize automatically.

The width and height are set for the specific dimension. If you move the dimension to the Offspread area and back to the Inspread area, the width and height are set to the values you have specified for that dimension.

Tip: The header height and width can manually be set by dragging the width and height indicators.

Procedure

1. In the **Options** window, click the **Headers** tab.
2. Select **Auto Size Headers**.

Formatting backgrounds

You can change the formatting of backgrounds areas.

You can change the color of background areas such as:

- Offspread
- Columns
- Rows
- Table
- Chart
- Drill Through

Procedure

1. Right-click the screen area that you want and click **Background** from the **Formatting** menu.
2. Select the color that you want.

   Note: This color becomes the default for the **Styles** or **Member** formats.

Formatting styles

Styles are organized in a hierarchy.

The **Default** style is the highest level. All other styles use the setting from the **Default** style. Settings in a lower level style overwrites higher level styles.

Auto style uses the setting from the higher-level style as the default.

The available styles are:

Level 2	Level 3	Level 4	Level 5	Affects
Cell				All table cells.
	Zero			Cells with zero values
	Positive			Cells with positive values
	Negative			Cells with negative values
	Text			Cells with text
	Missing			Cells with missing values

Level 2	Level 3	Level 4	Level 5	Affects
	No access			Cells the user has no access to due to security settings in the OLAP database server.
	Error			Cells displaying an error code from the OLAP database server.
	Label			Cells with members marked as labels in the database outline.
Data entry				All cells on screen when in data entry mode.
	Read Only			Cells the user has read-only access to due to security settings in the OLAP database server.
	Atomic			Cells at the lowest level. No other cells are used to create the value in this cell
	Aggregate			Cells that are an aggregation of Atomic cells. Values from Atomic cells make up the value in this cell
	Changed Value			Cells for which the user can change the value during data entry.
	Hold			Cells that are put on hold.
Header				The inspread row and column header areas.
	Row			The row header area (Inspread).
	Column			The column header area (Inspread).
Offspread				The area above the header in the chart. The dimensions that define the basis of the inspread members are not directly part of the table or chart.

Level 2	Level 3	Level 4	Level 5	Affects
Chart				Graphic display of data. Charts available are: Bar, Line, Area, Pie, Radar, Bubble, Scatter, Range, and Map.
	Chart Area			Space on screen to place a chart.
		Plot Area		Space in a chart specifically showing data values
			Axis	Related to a category (X-axis) or value (Y-axis).
			Grid	Lines within a plot area showing the relation and intersection of data values.
	Maps			Geographic representation of location data.
		Shapes		Parts that make up maps (for example countries or regions).
		Lines		Lines can be available in a shape file, representing rivers, roads, or railroads.
		Points		Points can be available in a shape file, representing cities or other points of interest (offices, customers, etc.).
	Labels			Feature names for charts and maps or, dimension values related to a chart or charts.
	Title			Name for chart.
	Legend			Identifies the members displayed in a chart or map.
Drill Through				Space on screen to place the Drill Through table.
Notes				Space on screen to place the notes.
Audit Report				The Audit Report on a printed page.

Level 2	Level 3	Level 4	Level 5	Affects
Printed Fonts				The page header and footer area on printed pages.
	Page Footer			The page footer area on printed pages.
	Page Header			The page header area on printed pages.

Procedure

1. Right-click in the table and select **Formatting** > **Styles**.
2. Select the format options that you want.

   Tip: Click **Reset All** to reset all style formatting options.

Formatting fonts

You can change the font type and style. The formatting options are applied to the display and to the printed view. It is possible to change the text and background colors.

Procedure

1. Right-click and select one of the following:
   - for a level, **Formatting** > **Levels** > **Style**
   - for a member, **Formatting** > **Members** > **Style**
2. Change the Font type, size or style.

   Note: The display of Auto in the entry boxes means that the setting is derived from the Style for this member. A filled background in the Font Style check box means the font style is derived from the Style for this member.
3. To change color, click **Text color** and **Back color.**

Formatting members

An individual member can be formatted.

You can also right-click in the table and select **Formatting** > **Members**. Then select the members you want to format

Member formatting overwrites Background, Style or Level formatting.

Procedure

1. Right-click the member you want to format, and select **Formatting**.
2. Select the formatting options that you want.

Formatting a cell

An individual cell can be formatted.

Procedure

1. Right-click the member you want to format, and select **Formatting** > **Members**.
2. Select the formatting options that you want.

Formatting prefix and display codes

You can determine how cell values are displayed.

The **Prefix** is left aligned and can be used for such things as currency symbols etc. The **Display Code** can be used to display negative values between brackets or to add a percent sign to the cell values.

Procedure

1. Right-click a member and select **Formatting** > **Members**.

   Note: The **Display Code** can be changed for a style, level and/or a member. The **Prefix** is only available for member formatting.
2. Type the codes that you want.

   The default **Prefix** is empty Auto() and the default **Display Code** is Auto (#s)

   To display a percent sign next to the cell value, enter the **Display Code**: #s %.

   To display negative values between brackets enter the **Display Code**: (#s).

   To add a dollar currency symbol in the prefix, enter $ in the **Prefix** field.

Results

The formatting options are applied to the displayed view and the printed view.

Formatting decimal numbers

The number of decimal places can be set with formatting options.

Procedure

1. For a style, right-click and select one of the following:
   - for a level, **Formatting** > **Styles**.
   - for a member, **Formatting** > **Styles**.
2. Change the number of decimals in the **Decimals** entry field.

   Note: You can also type a negative value. The values in the cell will be rounded off before the comma.

Formatting scaling factor

To improve readability, a value can be displayed with a scaling factor. For example, to display the actual values in units of 1,000 set the scaling factor to 0.001.

Values in the database are not changed by the scaling factor. The scaling factor only controls the way values are displayed.

You can also set a scaling factor for each member from the **Member Format** dialog box.

Procedure

1. Select **Options**.
2. Enter the scaling factor value.

Forcing read-only

When a cell is read-only, the cell will be grayed out and cannot be edited when starting data entry. The OLAP database security determines if a cell is protected from editing. It is also possible to make a member Read Only using formatting.

Procedure

1. Select one of the following:
   - For a style, **Formatting** > **Styles**.
   - For a Level, **Levels**.
   - For a member, **Formatting** > **Members**.
2. Select **Force Read Only**.

   Note: A filled background in the check box means the **Force Read Only** style is derived from the style for this member.

Formatting cell alignment

You can change the cell alignment with formatting options.

Procedure

1. Select one of the following:
   - For a style, **Formatting** > **Styles**.
   - For a Level, **Levels**.
   - For a member, **Formatting** > **Members**.
2. Set the horizontal cell alignment to **Left**, **Center**, or **Right**.
3. Set the vertical cell alignment to **Top**, **Center**, or **Bottom**.

   When changing the vertical alignment for individual cells, the option **Quick Row Formatting** on the **Format** tab of the **Options** dialog box should not be checked.

Formatting column and row size

You can change the cell size by column or by row size with the formatting options.

Procedure

1. Select one of the following
   - For a style, **Formatting** > **Styles**.
   - For a Level, **Levels**.
   - For a member, **Formatting** > **Members**.
2. Change cell width or height to adjust the column or row.

   The unit of measure can be changed to characters, inches, or centimeters.

   Note: The height of a row must always be high enough to display one line of all the different fonts and sizes in that row.

   Note: Using characters will ensure that columns are sized proportionally when the font or font size is changed.

Displaying names

You can change the member name, as it is displayed on screen, without changing the actual member or alias name in the outline of the OLAP database.

Procedure

1. Right-click a member and choose **Change Display Name**.
2. Type the new display name.

   Note: To remove the display name and show the member or alias name again, right-click the member with your secondary mouse button and choose **Change Display Name** from the pop-up menu. Click **Remove** to remove the display name.

   Note: To reset all display names to the original OLAP database outline names, right-click the window and choose **Display Names** > **Remove All**.

Quick formatting of rows

This is an option that controls how the row heights are calculated. Be aware though, with large tables, performance may be inhibited without using this option.

Procedure

1. Right-click and choose **Options**.
2. On the **Format** tab, de-select **Quick Row Formatting**.

   Note: The height of the entire row is adjusted to accommodate a single, changed cell.When changing the vertical alignment for individual cells, this option should be unchecked.

Formatting borders and lines

Borders can be added to rows, columns and cells. Borders can be set to all areas in your View.

The orientation of borders stays the same when you move members on your screen. Horizontal borders stay horizontal, vertical borders stay vertical.

Lines and white spaces can also be added. To add lines and white space, right-click a member and select **Formatting**.

Procedure

1. Right-click and click **Formatting**.
2. For a level, select **Levels**.

   For a member, select **Members**.
3. Do one of the following:
   - On the **Borders** tab select the border options that you want.
   - On the **Lines** tab select the line and white space options that you want.

Formatting precedence

You can control what takes precedence when both rows and columns are formatted. The default setting is that columns take precedence over rows.

Procedure

1. Choose **Options** from the toolbar.
2. Select the **Format** tab.
3. Select **Apply Rows before Columns** for rows to take precedence over columns.

   Select **Apply Columns before Rows.** for columns to take precedence over rows

Formatting white space

You can improve the readability in the row or column area by adding white space before or after dimension members.

Tip: You can format the space around a member by selecting **Color Cell Spacing** on the **Format** tab of the **Options** window.

Procedure

1. Select the **Headers** tab in the **Options** window.
2. Under **Automatic Group Spacing**, type a value and select a unit of measure.

Formatting number separators

You can change the characters used to display the decimal separator and the thousands separator.

The default setting is derived from your Microsoft Windows setting.

Procedure

1. Select the **Numbers** tab in the **Options** window.
2. Type the characters that you want to use for the **Decimal Separator** and **Thousand Separator**.

Formatting numbers

With the Group Size value you can control where to display the thousand separator.

Procedure

1. Click **Options** > **Numbers**.
2. From the **Group Size** menu, select where you want the thousand separator to be placed.

Traffic lights

You can set traffic lights to indicate the level of values for a member.

You can select colors, icons, or data bars to apply traffic lights.

For example, you can assign the color red to a range of values that indicates the need for action, yellow to a range of values that indicates the need for further investigation, and green to a range of values that indicates that all is well.

You can set the traffic lights based on

- **Values**

  The traffic lights are based on the absolute values of the cells.
- **Percentages**

  The traffic lights are based on the relative values compared to the maximum value of the cells.
- **Standard deviation**

  The traffic lights are based on both their absolute values and on standard deviation.

Setting traffic lights for members

You can apply traffic lights to all members, both offspread members and inspread members, including members that you created with the calculator. You can specify how the traffic light displays when the value is lower, in between, or higher than a specified value.

Procedure

1. Right-click the member > **Traffic Lights**.
2. From the **Based on** menu select how the traffic light is calculated. You can choose from
   - **Value**

     Specify values that are in the range of the values for the member.
   - **Percentage**

     Specify values between `0` and `100`.
   - **Standard Deviation**

     Specify values that are based on normally distributed data. For example `-1` and `1`.
3. In the **Less than** and **More than** fields enter the lower and upper value limits that you want to use.
4. Select how to display the traffic light. You can choose any combination of the following options:
   - **Text Color**
   - **Back Color**
   - **Symbols**

   You can use the available color and symbol templates or set your own combinations.

   The next example shows a traffic light with colored text and symbols.

		Year 2000
Region A	Product 1	19,905,209.99
	Product 2	2,649,321.89
	Product 3	2,352,349.03
	Product 4	182,653.54
	Product 5	3,070,421.21

Setting data bars

When you apply a traffic light to a member, you can enable Data Bars.

Data Bars are shown in each cell of the member. The length of the data bar represents the value of that cell relative to the minimum and to the maximum value within the cells.

Procedure

1. Set the traffic light according to the procedure: "Setting traffic lights for members."
2. On the **Options** tab select **Enable Data Bars**.
3. You can specify the color of the data bars with the **Use Custom Color** menu.

Swapping members that contain traffic lights

You can set traffic lights for offspread members just as you do for inspread members. Traffic lights that are set for offspread members apply to the entire table.

Procedure

1. Swap a member that has the traffic light condition with an offspread member.
2. If you do not want the traffic light condition for offspread members to apply to the entire table, then on the **Options** tab of the **Traffic Light** dialog box select **Exclude when in Offspread**.

Changing traffic light settings

You can change the traffic light settings and values.

Procedure

Right-click a member name and select **Traffic Lights**.

Setting traffic light options

You can set several options that change the look and feel of traffic lights.

Procedure

1. In the **Traffic Light** dialog box, click the **Options** tab.
2. Select the options that you want:
   - **Traffic Light Enabled**

     Select this option to enable the selected traffic light condition. When traffic light conditions are set, clearing this option only removes the traffic light display.
   - **Exclude when in Offspread**

     Select this option to not apply traffic light conditions to the inspread area when you drag the member with the traffic light condition to the offspread area.
   - **Exclude Calculations**

     Select this option to exclude from traffic light conditions any values that you computed using the calculator.
   - **Treat Missing As Zero**

     Select this option if missing values should equal zero.
   - **Create Color Ranges**

     Select this option to use colors to indicate the distance of the cell value between the upper and lower value the cell value is.
   - **Skip Groups for Ranges**

     When you have stacked dimensions, the members of the outer dimensions group the cells in your view. In either option, the traffic lights affected are based on percentage or standard deviation and data bars.

     If **Skip Groups for Ranges** is cleared, then the range of values that are found within each individual group of cell derive the traffic lights.

     If **Skip Groups for Ranges** is selected, then the range of values found across all groups of cells derive the traffic lights.
   - **Data Bars**

Select this option to enable data bars. You can specify the color of the data bars.

- **Symbol Position**

  Set the position of the symbol to the left or right of the value in the cell. You can also choose to only show a symbol instead of the value.

- **Use Text Color for**

  Use this option to specify whether the text color also applies to the symbol.

Example skip groups

The next examples show how the option **Skip Groups for Ranges** affects the traffic lights.

Skip Groups for Ranges is cleared:

		Year 2000
Total company	Product 1	47,482,213.75
	Product 2	15,651,192.87
	Product 3	10,614,461.17
	Product 4	889,492.62
	Product 5	25,459,244.55
Region A	Product 1	19,905,209.99
	Product 2	2,649,321.89
	Product 3	2,352,349.03
	Product 4	182,653.54
	Product 5	3,070,421.21
Region B	Product 1	10,667,795.20
	Product 2	9,196,833.29
	Product 3	1,871,587.59
	Product 4	492,405.17
	Product 5	8,129,013.75
Region C	Product 1	16,909,208.56
	Product 2	3,805,037.69
	Product 3	6,390,524.55
	Product 4	214,433.91
	Product 5	14,259,809.59

Skip Groups for Ranges is selected:

		Year 2000
Total company	Product 1	47,482,213.75
	Product 2	15,651,192.87
	Product 3	10,614,461.17
	Product 4	889,492.62
	Product 5	25,459,244.55
Region A	Product 1	19,905,209.99
	Product 2	2,649,321.89
	Product 3	2,352,349.03
	Product 4	182,653.54
	Product 5	3,070,421.21
Region B	Product 1	10,667,795.20
	Product 2	9,196,833.29
	Product 3	1,871,587.59
	Product 4	492,405.17
	Product 5	8,129,013.75
Region C	Product 1	16,909,208.56
	Product 2	3,805,037.69
	Product 3	6,390,524.55
	Product 4	214,433.91
	Product 5	14,259,809.59

Removing traffic lights

If you no longer need a traffic light, then you can remove it.

Procedure

1. Right-click the member and select **Traffic Lights**.
2. On the **Traffic Light** dialog box, click **Remove**.

Automation

The retrieval and selection of data can be automated.

Retrieving data manually

Use this option when navigating through very large outlines or when there is low network performance. Under normal conditions automatic data retrieval (the default setting) is able to retrieve data as quickly as you can navigate through the outline. However, when the server or network performance causes some delays in the retrieval process, switch to manual retrieval and retrieve the data at the end of the navigation process.

Procedure

1. From the toolbar, select **Options**.
2. Click the **Data** tab.
3. The default setting is **Automatically Retrieve Data**. De-select this option to manually retrieve data
4. Click **Get Data**.

Dynamic selection

A DynaSelect is designed to automate tasks. With a dynamic view (a View with a DynaSelect) tasks can be performed automatically.

Dynamic views can be used to do such tasks as:

- Checking sales persons who are behind budget (alerts monitoring)
- Selecting markets with sales values over a certain value (value-based filters)
- Printing views listing only products behind budget for each region (exception monitoring)
- Setting up a view that displays the correct data entry cells in the case of forecast or budget entry
- Setting up advanced member selections for example all cities with a population of more than 1 million

All available functions can be incorporated into a dynamic view. Calculations in a dynamic view can be created (and deleted again if needed). Members can be selected by value. Members can be moved from the Offspread area and back.

Setting DynaSelect

There is no programming involved in setting up a dynamic view. You can teach views to perform tasks by recording your actions.

When you have taught your view everything it needs to do, you can perform these tasks at the following times:

- On demand (F5)
- When opening a view
- When printing a view with a **Print Range**
- When selecting another offspread member

Procedure

1. Right-click the table and click **DynaSelect** > **Teach DynaSelect**.
   A red DynaSelect icon indicates that the DynaSelect is recording.
2. To stop recording, right-click **Dynaselect** > **Stop Teaching**.
3. To remove a DynaSelect, right-click **Dynaselect** > **Forget DynaSelect**. A DynaSelect can be removed while it is recording or after.

Viewing DynaSelect

Dynamic views are automatically documented for you.

The actions of a DynaSelect can be viewed by using the **View DynaSelect** option.

Procedure

1. Right-click **Dynaselect** > **View DynaSelect**.
2. The **View DynaSelect** window displays all tasks that the view will perform.

   Tip: If you pause your pointer over the DynaSelect icon, you will also see all tasks happen when the DynaSelect is applied.

Applying Dynaselect

You can run a DynaSelect at several occasions.

A DynaSelect can be run when:

- Opening a view
- Changing an Offspread member
- Printing the View with a Print Range
- On demand (by pressing F5)

Procedure

1. From the toolbar, select **Options**.
2. On the **Data** tab, click **Apply DynaSelect on Load** and/or **Apply DynaSelect on Offspread Changes**.
3. To apply a DynaSelect on demand, press F5.

Results

When a DynaSelect is recorded, the complete table and/or chart layout (including the calculations) is stored. When applying a DynaSelect, this initial layout is restored first. After that, the recorded actions are re-played.

The only change to the initial layout can be in the offspread area. When the option **Apply DynaSelect on Offspread Changed** is enabled, the new offspread layout is applied to the initial layout.

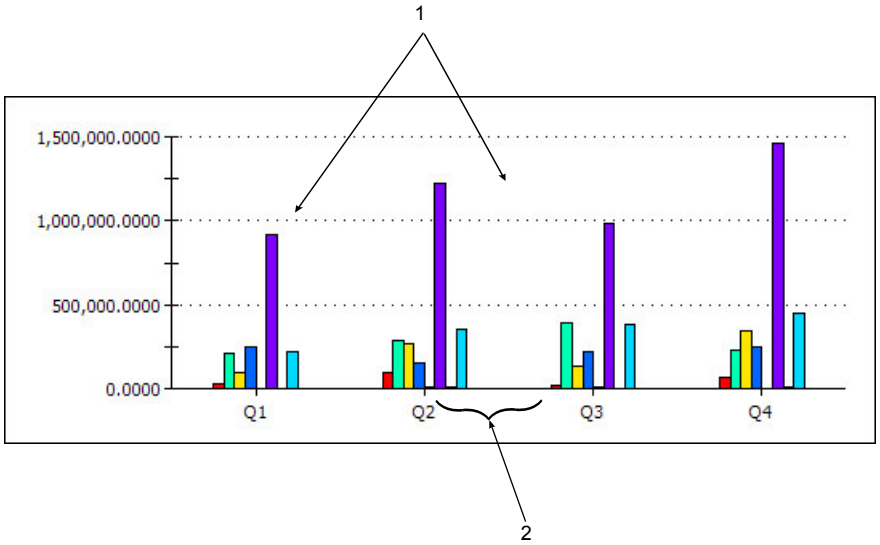
Chapter 6. Charts

Charts are a graphical way of presenting information. Use charts to reveal trends and relationships that are not evident in tabular reports. For example, you can create a chart to visualize how actual sales compare to projected sales, or to discover whether sales are falling or rising over quarterly periods.

Use maps to display chart data geographically. For example, create a map to show sales data for regional sales offices by city.

Use performance maps to visualize the behavior of two members of a dimension relative to members of another dimension.

This chapter uses two elements: data series and category. The chart below describes these two elements.



1. Data Series - A group of related data points plotted in a chart. Each series has a unique color or pattern and is described in the legend.
2. Category - Groups of related data from the data series, plotted on the x-axis. Categories of multiple data series are shown together using clustered and stacked data markers.

Chart types

To choose a chart type, consider what you want the chart to illustrate. Different chart types and configurations emphasize different things.

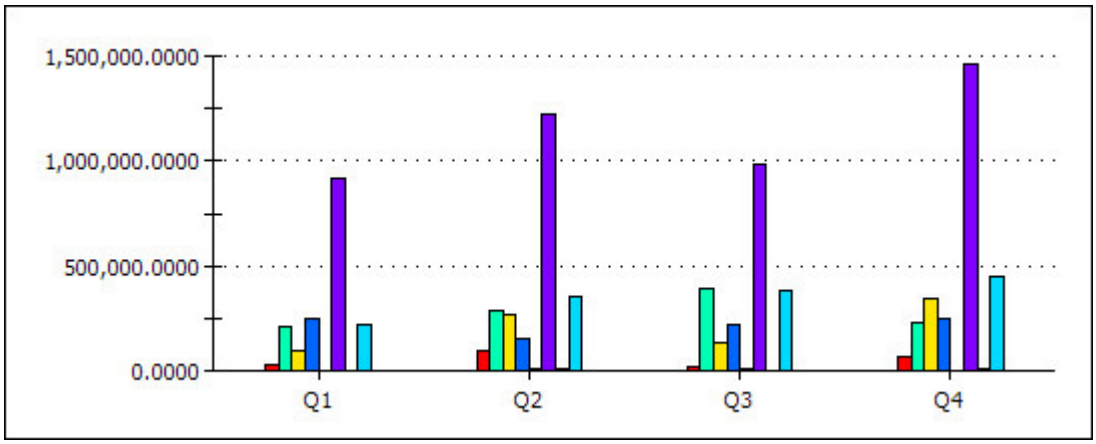
Chart Type	Icon
Bar chart	
Line chart	

Chart Type	Icon
Area chart	
Pie chart	
Radar chart	
Bubble chart	
Scatter chart	
Range chart	
Dial chart	
Maps	
Performance map	

Bar chart

Bar charts are useful to show the relative performance of different data series between categories, or to show trends over time. Bar charts can be either vertical or horizontal. The vertical bar chart can be called a column chart.

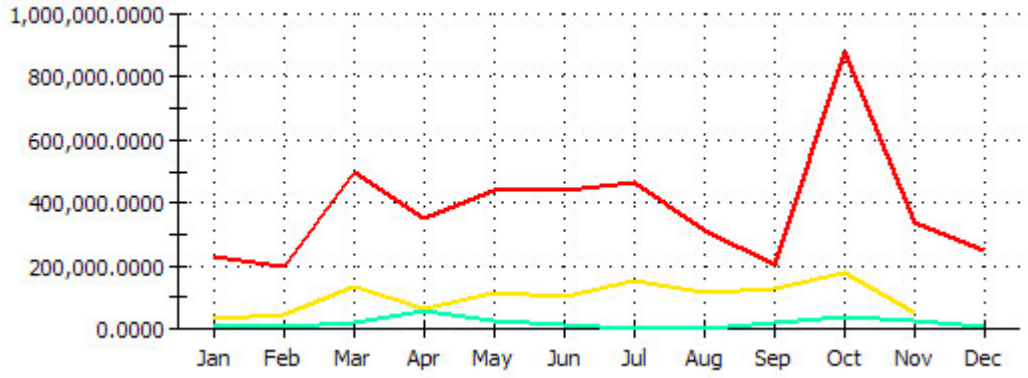
The example shows the relative performance of eight sales outlets over four quarters.



Line chart

Line charts show the trend between different data series over a period of time.

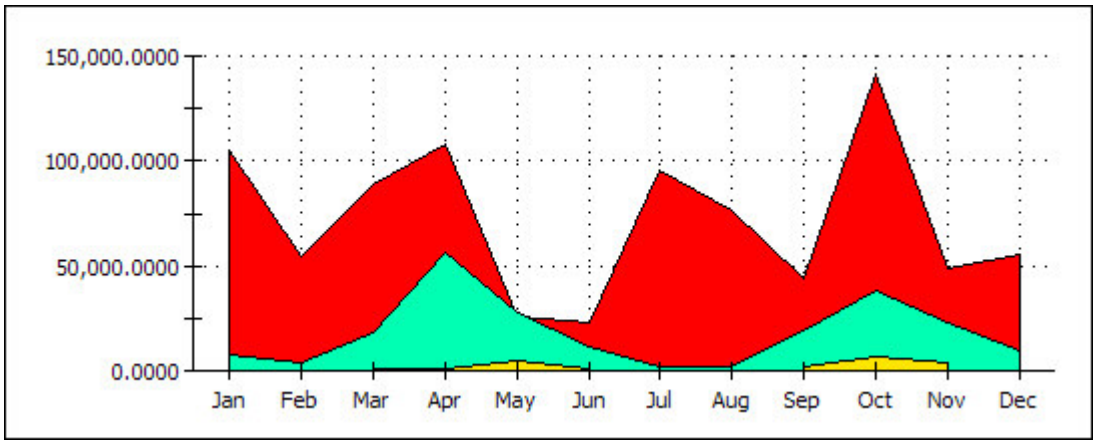
The example shows the sales trend for three different sales outlets over one year.



Area chart

Area charts are useful for emphasizing the magnitude of change over time. The area chart is based on the line graph.

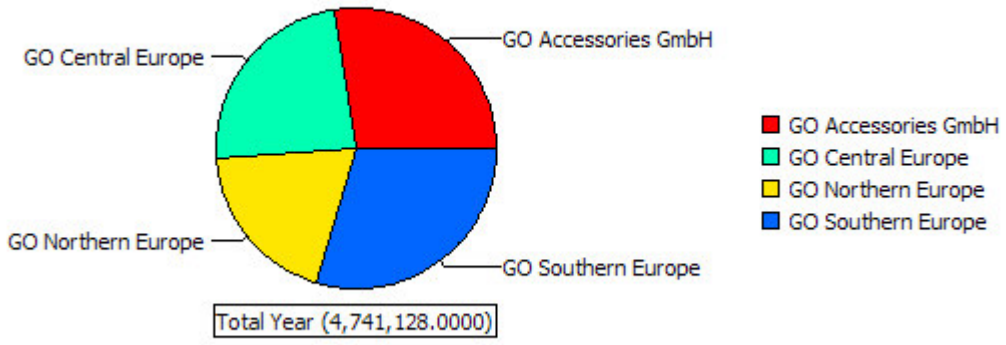
The example shows the relative sales volume for three different sales outlets over one year.



Pie chart

Pie charts show the total for the data series in proportion to each other. Pie charts use segments of a circle to show the relationship of parts to the whole. To highlight actual values, use another chart type, such as a stacked area chart. Pie charts plot a single data series. To avoid multiple charts when plotting multiple data series, use a 100 percent stacked chart.

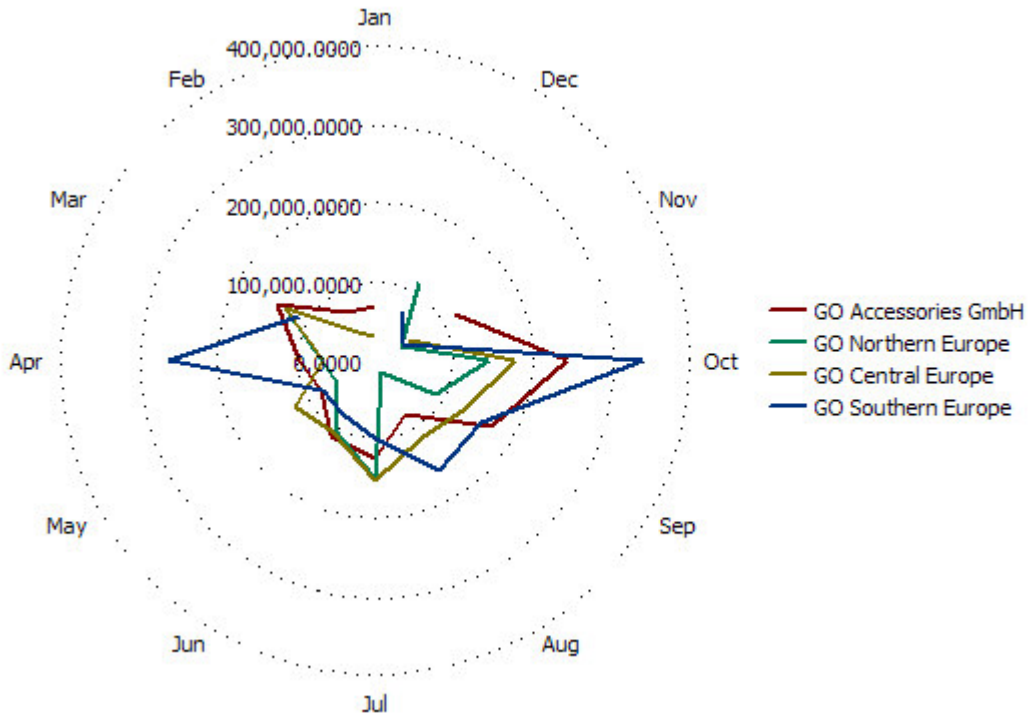
The example shows the relative sales of six different product outlets for one year.



Radar chart

Radar charts are useful as a comparative tool for charts that only have a few data series. Radar charts integrate multiple axes into a single radial figure. Data is plotted on each axis and joined to adjacent axes by connecting lines.

The example shows the sales for six product outlets over one year. All product outlets show the same sales trend for October.

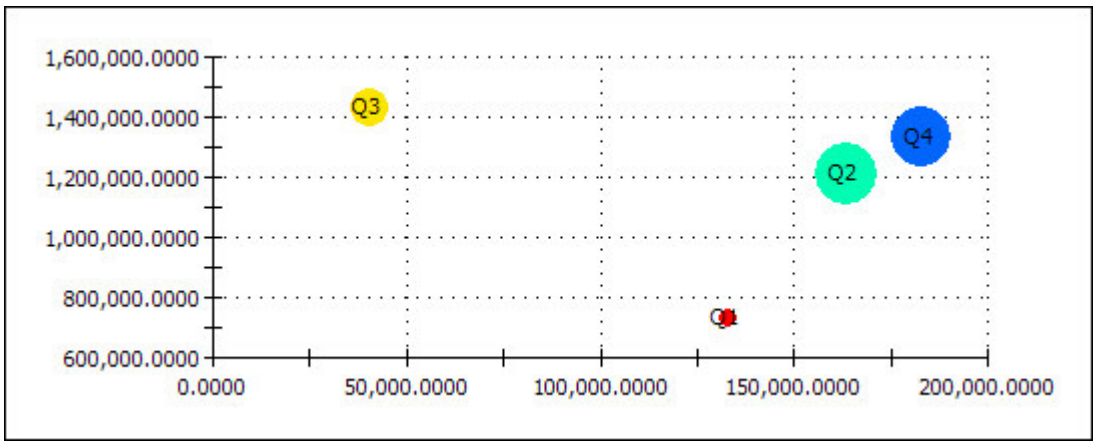


Bubble chart

Bubble charts, like scatter charts, use data points and bubbles to plot measures along a scale. The size of the bubble represents a third measure.

The example shows the relative sales of three outlets over four quarters. The X axis represents one outlet, the Y axis a second, and the size of the bubble represent the third.

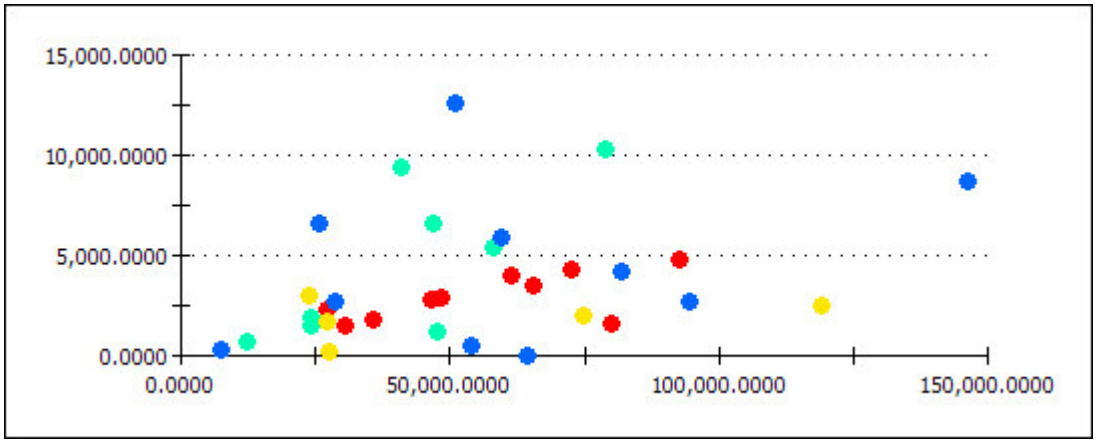
The symbols in a bubble chart can be changed, for more information see, “Formatting members in a chart” on page 114.



Scatter chart

In a scatter chart, the data is displayed as a collection of points, each having the value of one variable determining the position on the horizontal axis and the value of the other variable determining the position on the vertical axis. In the example the sales of two different products are compared for each month. The Y axis represent one product, and X axis the other. Each dot represent a store outlet for a particular month.

The symbols in a scatter chart can be changed, for more information see, "Formatting members in a chart" on page 114.



Range chart

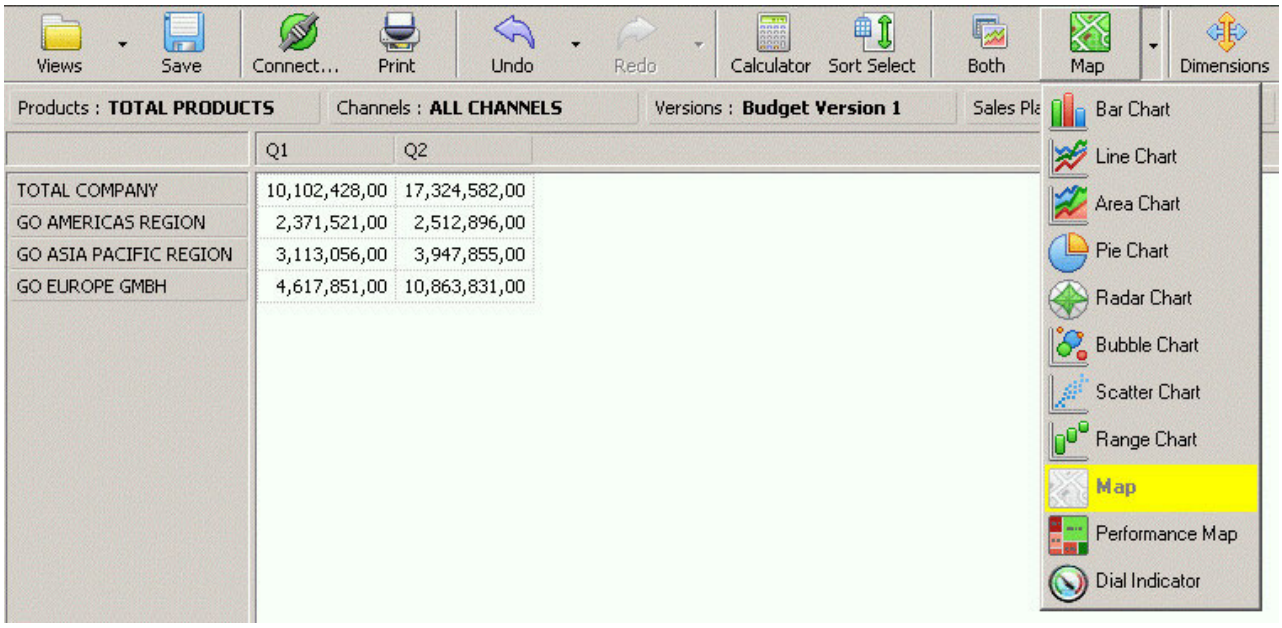
A range chart shows how an initial value increases by a series of intermediate values, culminating in a final value. An invisible column keeps the increases and decreases linked to the heights of the values of previous columns. The example shows how the sales value differs according to the outlet type.

Dial chart

A dial chart shows one or more values as needles on a circular scale. Dial charts are especially suitable for creating visually appealing dashboards.

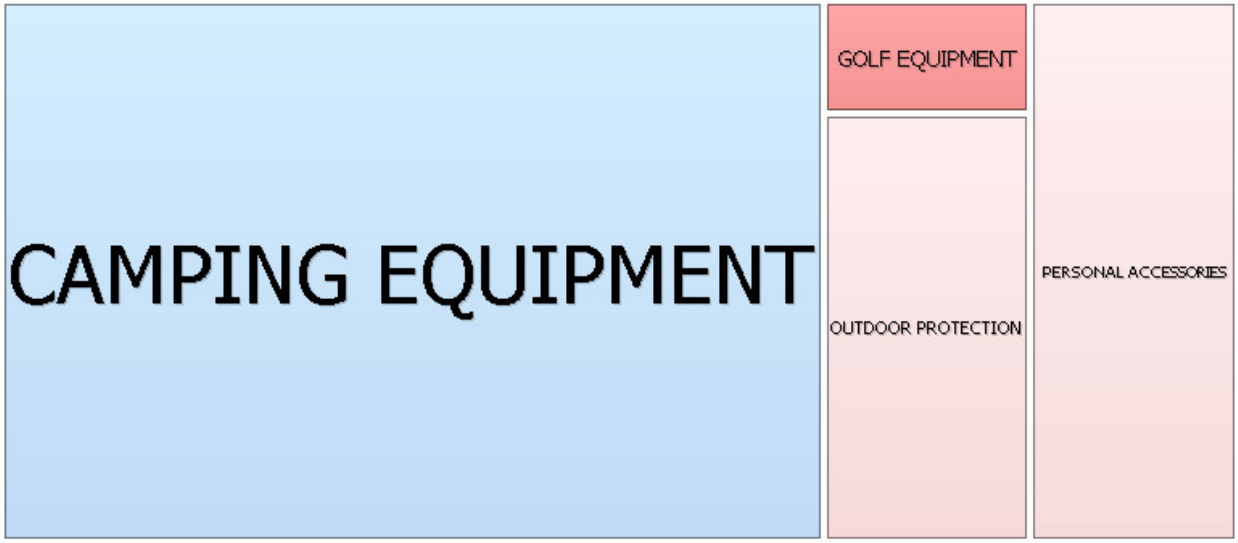
Maps

Maps show statistical information over a topological or geographical representation of an area.



Performance map

In performance maps the data is shown by the area of the data type. Performance Maps help to visualize the behavior of two members of a dimension relative to members of another dimension. The size of the Performance Map areas indicates the relative values of cells in the first column of the table view to the total value of the first column.



Creating a chart

A chart is made from the members that are in the view of a table representation.

These members are selected using the table view **Sort & Select** dialog box.

When the table has stacked dimensions in rows or in columns, the chart is based on the most inner dimensions. The outer dimensions are moved to the bottom of the chart pane with the selected members retained. If you have multiple rows in a table, the chart is based on inner rows. You can use the outer rows as additional selection criteria.

Selecting a chart

When you select a chart, then you need to make sure that the members in the table view are what you need to display as a chart.

Procedure

1. Click the **Chart View** icon on the tool bar.
2. Select the chart type.
3. To change a member selection, click in the chart over the member.

   Hint: Place the cursor over the member you want to change. If the member details show, you can change the member selection.
4. In the **Select Member** dialog box, change the member selection.

Results

The table changes when selecting new members for the chart.

Note: You can select other members in the offspread dimensions when you have a chart on screen. The same chart can be used for different member combinations.

Changing a chart type

You can change the type of chart by right-clicking the chart and choosing a style that better suits the data.

The chart type can be changed on the **Chart Type** tab on the **Options** dialog box.

Procedure

1. Right-click the chart and click **Options**.
2. From the **Chart Type** tab, click the required chart type.
3. Click **OK**.

Changing member properties for charts

You can change settings for the symbol, color shape and fill pattern for members depending on the chart type.

The chart symbols can be changed on the **Chart** tab on the **Member Formatting** dialog box.

Procedure

1. Right-click the member on the chart or table and click **Formatting**.
2. From the **Chart** tab, click the required color, symbol or fill pattern.
3. Click **OK**.

Selecting members in a chart

You can select or change members in a chart by clicking the members and making selections in the Member Select dialog box.

Procedure

1. In the chart, click a member.

   The **Select Members** dialog box appears.
2. Make the selection of members, select items in the hierarchical list, and then click **OK**.

   You can also go back to the table view by using the **Table** button on the toolbar to select other members.

Results

The new members appear in the chart.

Changing the order of members in a chart

You can reorder members.

To reorder members, click a member and use the up and down arrows on the **Member Select** dialog box to change the position of the member relative to other members.

When color formats are not set from members, the color remains with the order of placement. If the first member is blue, when you move the first member to the third position, the new first member is also blue.

Note: You can determine the individual color of a chart member. For more information, see "Formatting members in a chart."

It is not possible to change the order of members in combination with DynaSelect.

Procedure

1. In the chart, click a member.

   The **Select Members** dialog box appears.
2. Click the **Order** tab.
3. Click the member whose position you want to change, and then click the up or down arrows to move the item relative to the other members.
4. Click **OK**.

   Note: The order of members can also be changed by moving them in the legend. Click the member you want to move and drag it to its new position.

Formatting members in a chart

You can customize the formatting options for a member.

The following formatting options are available:

- **Color**.
- **Symbol** for Line and Radar charts.
- **Fill Pattern** for bar, area, pie and map charts.
- **Line Width** for line and radar charts.
- **Symbol Size** for Line, Scatter and Radar charts. The option **Symbol on Lines** must be checked in the **Chart Type** tab of the **Options** dialog box.
- **Label Text**. The option **Display Values** must be checked in the **Chart Type** tab of the **Options** dialog box.
- **Label Back**.
- **Display Label** sets or suppresses a label to one or more points in the chart. A solid background in this check box means the setting is derived from a formatted row, columns or from the level formatting.

Procedure

1. Right-click the symbol in the chart and click **Formatting**.
2. Click the **Chart** tab.
3. Select formatting options and click **OK**.

   Note: You can select the option **Same As Table** from the drop-down menu to apply the table formatting to the chart member.

Combining a chart with a table

Both a table and chart can be visible on screen at the same time.

Adding a chart to the current table view

You can add a chart to the current table view.

Procedure

1. On the toolbar, click **Both**.
2. To resize the chart, drag the splitter in the middle of the window.

Adding a table to the current chart view

You can add a table to the current chart view.

By default, the chart is shown on the right side of your screen. You can change this in the **Options** dialog box, **Layout** tab. Select the place where you want the chart to be placed on screen. You can choose to see the chart on the top, left, right, or bottom side of the screen.

Procedure

1. Right-click the chart, and then click **View As Table and Chart**
2. To resize the table, drag the splitter in the middle of the window.

Changing the legend in a chart

By default, a legend is displayed in the chart. You can hide or reposition the legend. You can also add a title to the legend.

Tip: To hide the legend, right-click the chart and deselect the **Legend** option, or from the pop-up menu, click **Options** and on the **Chart Type** tab, deselect **Legend**.

Procedure

1. Right-click the chart and then click **Options**.
2. On the **Chart Options** tab, in the **Legend Position** drop-down box, click the position of the legend.
3. To add a title, in the **Legend box** type a title.
4. Click **OK** to close the dialog box.
5. To change the appearance of the legend, right-click the legend and select the **Format Styles** tab.
6. Change the legend styles, such as font type, size and style, text and background color, and borders.
7. After you have finished updating the legend options, click **OK**. The legend appears with a title.

Drilling up or drilling down in a chart

You can drill up and drill down to change the focus of your analysis by moving between levels of information.

Drill up to compare results. For example, you can examine revenue for a single product and then drill up to see revenue for the entire product line for comparison.

Drill down to see more detail. For example, you can drill down to the lowest-level item to examine the impact of a single aspect of your business.

Drilling up

This section describes how to drill up.

Procedure

1. Right-click the member on which to drill.
2. From the pop-up menu, click **Drill up**.

Drilling down

This section describes how to drill down.

Procedure

1. Right-click the member on which to drill.
2. From the pop-up menu, click **Drill down**.

   To include the parent in your chart, click **Include Children Here** instead of **Drill down**.

   Note: You can also **Drill up** and **Drill down** by right-clicking the legend.

Adding a background image to a chart

You can add an image, that is stored in a location available to Express Advisor client, as a background image to a chart.

Note: For information about making images available to Express Advisor client, see the *Managing IBM Cognos Express* guide.

Procedure

1. Right-click the chart and then click **Format Styles**.
2. Click the **Background** tab.
3. From the **Image** menu select an image.
4. Choose an **Image Mode**:
   - To display the image in its original size, select **Normal**.
   - To display the image in its original size and repeat it so that it fills the available space in the window, select **Tile**.
   - To stretch the image to fill the window size, select **Stretch**.
   - To stretch the image while maintaining the aspect ratio, select **Stretch Ratio**.
5. To move the image, set the **Image Alignment** using the **Horizontal** and **Vertical** boxes and corresponding offsets.
6. To move the chart, set the **Chart Margins**.

   Tip: To position the image next to the chart, set the top and left margin of the chart to higher values.
7. Click **OK**.

Results

The chart appears with a background image.

Customizing the axes of a chart

For a bar, line, area, or radar chart you can set the amount of ticks and labels on the x-axis to improve the readability of the x-axis.

For a bubble or a scatter chart, you can set the y-axis as well as the x-axis.

For a dial chart you can set the amount of ticks on the axis to improve the readability.

There are two scaling options, **Automatic** and **Custom**. The **Automatic** option sets the y-axis to the lowest and highest integer value in the chart.

The **Custom** options are:

- **Number of Labels**
- **Number of Gridlines**
- **Maximum Value**
- **Minimum Value**

Note: For the **Number of Gridlines** option to be active, **Vertical Grid** or **Horizontal Grid** must be enabled on the **Chart Type** tab of the **Options** dialog box.

Procedure

1. Click the **Options** icon on the tool bar.
2. Select the **Chart Type** tag.
3. To change the orientation of labels from horizontal to vertical, set the **Vertical Labels** check box.
4. To reduce the number of labels on the chart increase the value of the **Label every** box.
5. To reduce the amount of ticks on the chart, increase the value of the **Tick every** box.
6. Select **Scaling** options:
   - Click **Automatic** to set the y-axis to the nearest integer value in the chart.
   - Click **Custom** to manually select the options.
7. Click **OK**.

Results

The chart displays with the options you set for label orientation and scaling.

Setting the origin of a chart to zero

For a line, dial, radar, or bubble chart, you can set the origin of the scale to zero.

Note: When setting the primary scale to **Zero Origin** and the secondary scale to **Same as Primary**, the secondary scale will have a zero origin as well.

Procedure

1. Right-click a table or chart and click **Options**.
2. On the **Chart Type** tab, set the **Scale Type** to **Zero Origin**.

Generating a chart with two scales

If you need to plot two members with different scales, such as absolute figures and a percentage, a chart with two scales (two y-axes) can be created.

Procedure

1. To enable the second scale, right-click the chart and select **Options**.
2. On the **Chart Type** tab, under **Secondary Chart**, set the **Enable** check box.

   The settings of the second scale as well as the settings for the primary chart can be adjusted.

   Tip: If you use the pull-down list with the second scale, you can also choose to make the second scale identical to the primary scale, or for both scales to have the same origin.
3. When you have a second scale and you want more members beyond the last member on the second scale, adjust the **Last rows used** option on the **Chart Type** tab.

   Tip: When the values of the second scale are very different from the values of the primary scale, it might give a better overview to use the option **Same Origin**.
4. Click **OK**.

Results

The chart appears with both scales.

Generating a chart with stacked dimensions

If you have stacked dimensions you can create a chart using these stacked dimensions. Two stacked dimensions can be merged into one.

For example, if your table contains the dimensions **Scenario**, with members **Actual** and **Prior**, and a dimension **Year** with 3 months, you can create a chart over all 6 months. By merging columns, the chart displays the data over two stacked dimensions (with 2 times 3 months) as if it were one dimension with 6 months.

Procedure

1. Right-click the chart and select **Options**.
2. On the **Chart Options** tab, set the **Merge Columns** check box and click **OK**.

   Note: On the **Options** dialog box, on the **Chart Type** tab, you can check the option **Vertical Labels**.

Swapping the axes for a table or a chart

You can swap the x-axis and y-axis of both the table and the chart, either together or separately. To swap the x-axis with the y-axis, drag the members and drop them on the other axis. Swapping the axes will change the chart from horizontal to vertical.

If only the chart should change, and not the table, use **Chart Options** to set the **Flip Data on Axis** check box. Only the axes in the chart will change, not the table.

Changing the axes for the table and chart

This section describes how to change the axes for the table and the chart.

Procedure

1. In the Table view, drag and drop members from one axis to the other.

The x-axes and y-axes have changed position. The data on the axes can also be flipped.

2. To exchange data on an axis with the legend, in the Chart view, drag the members from the axis to the legend.

   The table and chart are now changed.

Changing the axes for the chart only

This section describes how to change the axes for the chart.

Procedure

1. To swap only the chart, and not the table, right-click the chart.
2. Click **Options** and then click the **Chart Options** tab.
3. Set the **Flip Data on Axis** check box and click **OK**.

   The selected axes are exchanged.

Maps

One of the most important features of Maps is that a map can be associated with members in your database. Your data can overlay either a geographical map or a physical structure. An office, an aeroplane, or a ship are examples of structures.

The association of a database to a map is done during the installation process in a mapping file.

Associating data to a map

Maps are installed during the setup process.

To link a table to a map do these steps:

Procedure

1. Select the members you want to display as a map.

   For example, in the rows, select market cities and in the columns select the dimension that contains the data, such as products that you want to analyze.

2. Click the **Chart** button, and then click **Map**.

   To deselect members from the map, right-click an item and click **Deselect**.

Results

A map is now shown, focused on the members that were selected in rows of the table. The column members are shown as a pie chart.

Placing a chart on a map

A map can display data either as a label, a chart (Pie or Bar), or as a Traffic Light condition.

Procedure

1. Click the **Options** button.
2. To display data as a chart, select the overlay type from the **Options** dialog box, **Chart Type** tab.

   When initially viewing a Map, the data is displayed as a Pie chart.

3. Click the **Options** button in the tool bar, or right-click the map and click **Options**.
4. On the **Chart Type** tab, select **Bar Chart** as the overlay.

   You can also control additional settings for the chart, such as **Display Total**, **3D-Look**, **Legend** and **Outlined**.
5. Set other chart options and click **OK**.

Results

Every shape that has a corresponding member in the table now shows a bar chart with the data in the columns displayed as Bar charts.

Tip: When choosing **None** as the overlay type on the **Chart Type** tab of the **Options** dialog box, the data will be displayed as a label when you check the option **Display Total**.

Viewing traffic light conditions on a map

Traffic Light conditions in a table can be viewed in a map. The shapes in the map are colored either using the text color or the background color of the Traffic Light condition.

Procedure

1. In the **Options** dialog box, select the **Chart Type** tab and set **Traffic Light** as the overlay type.
2. Make sure **Use Background Color** is selected in the **Traffic Light** options.
3. Click **OK**.

Performance maps

A performance map is a chart that presents data by using different sizes and colors for performance map areas. Performance maps visualize the behavior of two members of a dimension relative to members of another dimension.

A performance map is defined by the rows and the first two columns in a view. Each row identifies a performance map area. The first column defines the size of the performance map area. The second column defines the color of the performance map area.

The size of the performance map areas indicates to what extent the values of cells in the first column contribute to the total value of the cells in the first column.

If the performance map option **Fixed Text Size** is not enabled, the size of the text in the performance map areas corresponds to the size of the performance map areas.

The colors of performance map areas are used to identify values of cells. This identification can be defined in two ways:

- By using the **Cell Text Color** or **Cell Background Color** via either: **Traffic Lights** or **Formatting**.
- By specifying the **Lower Bound** and **Upper Bound** via either **Fixed Values** or **Standard Deviation**.

Creating a performance map

Create performance maps to visualize the behavior of two members of a dimension relative to the members of another dimension. Performance maps enable you to present data by using different sizes and colors.

The layout of performance maps can be customized to your needs. There are several options available. All options are available on the **Chart Type** tab on the **Options** dialog box. Some commonly used options can also be selected by right-clicking the performance map.

Procedure

1. Place two members of a dimension in the first two columns of a table.

   The member in the first column determines the size of the areas of the performance map. The member in the second column determines the color of the areas on the performance map.
2. Place a dimension in the rows.

   Note: Only the first two columns are taken into account when you create a performance map.
3. After you have set up the table, click **Chart** > **Performance Map**.

   You can now set options for the performance map, including options that are specific to performance maps, such as **Display Caption**, **Fixed Text Size**, **Ordered**, and **Add Hierarchy**.
4. To display captions for member node items, set the **Display Captions** check box.
5. To display uniform text size for all items, set the **Fixed Text Size** check box.
6. To display members in the same order as they appear in the rows of the table, set the **Ordered** check box.
7. To group items according to the hierarchical structure, set the **Add Hierarchy** check box.
8. After you have finished setting options, including coloring options, click **OK**.

Results

The performance map appears.

Setting the performance map options

The layout of Performance Maps can be customized to your needs.

There are several options available. All options are available on the **Chart Type** tab on the **Options** dialog box. Some commonly used options can also be selected by right-clicking on the Performance Map.

The options that are specific to Performance Maps are:

- **Display Captions**

  The Display Captions option determines whether captions are displayed when Parents or Ancestors of the members are selected.
- **Fixed Text Size**

  The Fixed Text Size option changes the size of the text that is shown in the Performance Maps areas to one size. With this option turned on, the text size is no longer dependent on the size of the areas in the Performance Map. For optimal clarity, display the captions when you choose Fixed Text Size.

- **Ordered**

  The Ordered option determines in what order the areas in a performance map are displayed. By default the chart areas are displayed using an algorithm that makes the areas as square as possible. If you select the option **Ordered** the areas are displayed in the same order as the members in the rows, starting at the top-left and ending at the bottom-right.
- **Add Hierarchy**

  The **Add Hierarchy** option adds areas around child members if a child member and its ancestor are selected, and, if the parent of that same child is not selected.

Procedure

1. Right-click the chart and click **Options**.
2. On the **Chart Options** tab, set the performance map options and click **OK**.

Results

The performance map options appear.

Setting coloring for performance maps

You can change the color options for a Performance Map with the Coloring Mode.

The Lower Bound and Upper Bound values allow you to specify an interval by using fixed values. The **Create Color Range** option lets you choose to create a blended color range.

Procedure

1. Click the **Options** button.
2. Select the **Chart Type** tab.
3. Check the **Fixed Values** option.
4. Use the side scroll bar to access the color options.
5. Change the color options for the Lower Bound Color, Mean Color, and Upper Bound Color.
6. Click **OK**.

Appendix. Using the IBM Cognos Express Advisor URL API

Express Advisor Dispatcher enables you to make URL calls that contain parameters in order to open views, folders or packages.

This section provides information about using IBM Cognos Express Advisor Dispatcher.

If the IBM Cognos Express Service is started you can open IBM Cognos Express Advisor by entering the following URL:

http://<SERVER LOCATION>:19300/p2pd/servlet/dispatch?b_action=EVService

Parameters for the IBM Cognos Express Advisor URL API

It is possible to add parameters to the request URL.

This is done by adding the following to the URL API call: *&<parameter name>=<parameter value>*.

For example:

http://<SERVER LOCATION>:19300/p2pd/servlet/dispatch?b_action=EVService &ui.lang=de

The possible parameters are:

ui.action

The ui.action parameter specifies which action has to be performed with an Advisor Object. Possible values:

- **Run**

  The *ui.action=run* parameter results in a view or package being opened. When the ui.action *run* is used, an object item must be specified.
- **Edit**

  The *ui.action=edit* parameter results in a view or package being opened. When the ui.action *edit* is used, an object item must be specified.
- **New**

  When the ui.action *new* is used, it is possible to specify no ui.object. A new view will be created.

ui.name

This parameter specifies the name that is displayed in the title bar of Express Advisor. If there is no name specified, the product name will be used.

ui.object

This parameter specifies the content store location of the object to be run. For Express Advisor this parameter represents the view or folder items that are stored in the Express Content Store. If this parameter is not specified, Express Advisor will be opened without an active view.

ui.format

This parameter specifies the output format. The supported format is HTML. This means that if this parameter is not specified, HTML is used as format.

ui.lang

This parameter specifies the language of the user interface. If the specified language is not supported by Express Advisor, the default language (English) will be used. The following languages are supported:

Value of the ui.lang parameter	Language in the user interface
en	English (default)
cs	Czech
da	Danish
de	German
es	Spanish
fr	French
hu	Hungarian
hr	Croatian
it	Italian
ja	Japanese
ko	Korean
nl	Dutch
pl	Polish
pt	Portuguese
ro	Romanian
ru	Russian
tr	Turkish
zh-cn	Chinese
zh-tw	Chinese traditional

ea.controlid

This parameter specifies the Express Advisor ea.control id property. When the dispatcher is called, the Express Advisor dispatcher returns an HTML page. This

parameter represents the control ID of the ActiveX object and allows the user to set the control id of this HTML object. If there is no ea.controlid specified, the ID of the control will be set to *EVObject*.

ea.toolbar

This parameter specifies the Express Advisor ea.toolbar property. The possible values are *true* or *false*. By default, if no ea.toolbar parameter is specified, the toolbar will be enabled.

ea.tabbar

This parameter specifies the Express Advisor ea.tabbar property. The possible values are *true* or *false*. By default, if no ea.tabbar parameter is specified, the tabbar will be enabled.

ea.viewsbutton

This parameter specifies the Express Advisor ea.viewsbutton property. The possible values are *true* or *false*. By default, if no ea.viewsbutton parameter is specified, the views button will be enabled. Please note that the view button is available on the toolbar. This parameter will only have effect on the user interface if the toolbar is enabled.

ea.theme

This parameter specifies the Express Advisor theme property. If no theme is specified by Express Advisor, the default theme (Express) will be used. Currently the following values are supported:

- Classic
- Ocean
- Desert
- Forest
- Olive
- Silver
- Sky
- Cognos
- CognosUI
- Express (default)

ea.width

This parameter determines the width of the IBM Cognos Advisor Control. Can be specified in pixels or in percentage.

If you specify as a percentage make sure the correct URL Encoding is applied. For example: 50% width is specified as ea.width=50%25.

If you specify it in pixels, enter the number of pixels. For example: 250 pixels width is specified as ea.width=250.

ea.height

This parameter determines height of the IBM Cognos Advisor Control. Can be specified in pixels or in percentage.

If you specify as a percentage make sure the correct URL Encoding is applied. For example: 50% width is specified as ea.height=50%25.

If you specify it in pixels, enter the number of pixels. For example: 250 pixels width is specified as ea.height=250.

ea.controlid

This parameter specifies the Express Advisor ea.control id property. When the dispatcher is called, the Express Advisor dispatcher returns an HTML page. This parameter represents the control ID of the ActiveX object and allows the user to set the control id of this HTML object. If there is no ea.controlid specified, the ID of the control will be set to *EVObject*.

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Glossary

The following cross-references are used in this glossary:

- See refers you from a term to a preferred synonym, or from an acronym or abbreviation to the defined full form.
- See also refers you to a related or contrasting term.

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A

asymmetric selection
In stacked dimensions, a selection in whose members in rows or columns can be different for each group. An asymmetric selection can be made manually, or can be the result of a sort action or a result of removing missing value.

D

data entry
A mode that allows a user to navigate through the database and add or change stored data in the OLAP database.

dimension
A broad grouping of descriptive data about a major aspect of a business, such as products, dates, or locations. Each dimension may include different levels of members in one or more hierarchies and an optional set of calculated members or special categories.

dimensions dialog
A dialog that allows a user to change the order and the selections in both the Offspread and the Print Range dimensions. Dimensions can be shown, hidden, or ignored.

drill down
In a multidimensional representation of data, to access information by starting with a general category and moving downwards through the hierarchy of information, for example from Years to Quarters to Months.

drill through
To view the details linked to the data in a report, cube, or macro. For example, the user can drill through a value to view the detailed sales transactions for a particular customer. Any filtering of information in the original object is automatically applied.

DynaSelect
A user function that makes a record of frequently used actions. Used to record opening, printing, or other actions on a particular view.

H

hover drill button
A button that facilitates the ability to drill down on members. Hover drill buttons can be permanently visible, or visible only when hovering with the mouse pointer over a member. It is also possible not to show hover drill buttons.

I

inspread
The header area of a table. Inspread dimensions make up a table and are allowed to have more than one member in a selection.

item
A data element that is stored in the repository. Items can be folders, views, databases, data sources, images, or shortcuts.

M

member
A node in a dimension structure.

model definition
Data that is used as input for analyzing relational data. A model definition forms the basis for the OLAP database and

contains dimensions that are created from the tables and relationships of a relational database.

O

offspread
The area that is outside a table or chart. The offspread includes dimensions that are not directly part of the table or chart. These dimensions are fixed to one member and specify part of the data that should be viewed.

P

portlet
A reusable component that is part of a web application that provides specific information or services to be presented in the context of a portal.

provider
A program that gives catalog, security, and log functionality to Executive Viewer.

R

R/C calculation
See row column calculation.

repository
A persistent storage area for data and other application resources.

row column calculation
A calculation that works with relative members rather than absolute members. In an R/C calculation, the members are included based on their position in the dimension selection of rows or columns and not by name.

S

stacked dimension
One or more dimensions that are on top of a dimension in a table. Dimensions can be stacked in rows as well as columns.

symmetric selection
In stacked dimensions, a selection whose members in rows or columns are the same for each group.

T

traffic light
A feature that allows a user to apply a color to cells or shapes based on their value.

V

view An area within a table or chart, including rows, columns, an offspread area, and optionally a drill-through pane. It shows the data that is stored in the OLAP database.

Index

E

F

G

H

I

L

M

N

O

P

R

S

T

U

V

W

X

Y

Z